

N7977462



April, 1979

DMS-DR-2417
NASA CR-151,770

RESULTS OF AEROTHERMODYNAMIC HEAT TRANSFER TESTS ON A
0.03-SCALE MODEL (93-0) SIMULATING THE ELEVON/ELEVON
GAP AND ELEVON/FUSELAGE INTERFACE REGIONS OF THE
SPACE SHUTTLE ORBITER IN THE AMES RESEARCH CENTER
3.5-FOOT HYPERSONIC WIND TUNNEL (OH58)

by

R. B. Kingsland
Rockwell International, Space Systems Group

Prepared under NASA Contract Number NAS9-13247

by

Data Management Services
Chrysler Corporation Michoud Defense-Space Division
New Orleans, La. 70189

for

Engineering Analysis Division

Johnson Space Center
National Aeronautics and Space Administration
Houston, Texas

WIND TUNNEL TEST SPECIFICS:

Test Number: ARC 3.5-235
NASA Series Number: OH58
Model Number: 93-0
Test Dates: March 24, 1978 through April 21, 1978
Occupancy Hours: 168

FACILITY COORDINATOR:

Joseph G. Marvin
Mail Stop 229-1
NASA-Ames Research Center
Moffett Field, CA 94035

Phone: (415) 965-5390

AEROTHERMAL ANALYSIS ENGINEER:

C. B. Blumer
Mail Code AC78
Rockwell International
Space Systems Group
12214 Lakewood Boulevard
Downey, CA 90241

Phone: (213) 922-3571

PROJECT ENGINEERS:

J. Cleary
Mail Stop 229-1
NASA-Ames Research Center
Moffett Field, CA 90435

Phone: (415) 965-5390

R. B. Kingsland
Mail Code AD38
Rockwell International
Space Systems Group
12214 Lakewood Boulevard
Downey, CA 90241

Phone: (213) 922-5030

DATA MANAGEMENT SERVICES:

Prepared by: Liaison--D. W. Hersey
Operations--M. M. Mann

Approved: J. L. Glynn
J. L. Glynn, Manager
Data Operations

Concurrence: N. D. Kemp
N. D. Kemp, Manager
Data Management Services

Chrysler Corporation Michoud Defense-Space Division assumes no responsibility for the data presented other than display characteristics.

RESULTS OF AEROTHERMODYNAMIC HEAT TRANSFER TESTS ON A
0.03-SCALE MODEL (93-0) SIMULATING THE ELEVON/ELEVON
GAP AND ELEVON/FUSELAGE INTERFACE REGIONS OF THE
SPACE SHUTTLE ORBITER IN THE AMES RESEARCH CENTER
3.5-FOOT HYPERSONIC WIND TUNNEL (OH58)

by

R. B. Kingsland
Rockwell International, Space Systems Group

ABSTRACT

Results of test OH58 and pertinent test and model information are presented in this report. Test OH58 was performed in the NASA/ARC 3.5-Foot Hypersonic Wind Tunnel from March 24 through April 21, 1978. Test objective was to measure detailed elevon/elevon gap and fuselage/elevon interface heating distribution to verify design heating rates. The model utilized for OH58 was a .04-scale simulation of the orbiter elevon/elevon stub region and an approximately .03-scale representation of the fuselage/elevon region of the orbiter. The model was instrumented with static pressure orifices and thermocouples.

(THIS PAGE INTENTIONALLY LEFT BLANK.)

TABLE OF CONTENTS

	Page
ABSTRACT	iii
TABLE OF CONTENTS	1
INDEX OF MODEL FIGURES	3
NOMENCLATURE	4
CONFIGURATIONS INVESTIGATED	8
INSTRUMENTATION	10
TEST FACILITY DESCRIPTION	11
TEST PROCEDURE	12
DATA REDUCTION	14
REFERENCES	18
TABLES	
I. TEST CONDITIONS	20
II. DATA SET/RUN NUMBER COLLATION SUMMARY	21
III. MODEL DIMENSIONAL DATA	31
IV. ELEVON AND STUB THERMOCOUPLES	34
V. FUSELAGE SIMULATION THERMOCOUPLES	36
VI. FLAT PLATE LOWER SURFACE THERMOCOUPLES	38
VII. ELEVON PRESSURES	39
VIII. FUSELAGE SIMULATION PRESSURES	40
IX. FLAT PLATE LOWER SURFACE PRESSURES	41

TABLE OF CONTENTS (Concluded)

	Page
FIGURES	
MODEL	42
APPENDIX	
TABULATED SOURCE DATA	

INDEX OF MODEL FIGURES

Figure	Title	Page
1.	General model configuration.	42
2.	Model sketches.	
	a. Elevon Thermocouples	43
	b. Stub Thermocouples	44
	c. Fuselage Simulation Thermocouples	45
	d. Flat Plate Lower Surface Thermocouples	46
	e. Elevon Pressures	47
	f. Fuselage Simulation Pressures	48
	g. Flat Plate Lower Surface Pressures	49
3.	Model photographs.	
	a. Side-View of Model Installed in Test Section	50
	b. View Looking Forward of Elevon/Elevon Gap Configuration (EE)	51
	c. View Looking Forward of Elevon/Fuselage Interface Configuration (EF)	52

NOMENCLATURE

<u>PLOT SYMBOL</u>	<u>MNEMONIC</u>	<u>DESCRIPTION</u>
<u>Thermocouple Portion of Test</u>		
b		thickness of model skin
C		specific heat of model skin material
C_0, C_1, C_2		constants in curve fit for C over model wall temperature range
c_p		specific heat of air stream (perfect gas value)
CHAN	CHAN	recording-system channel
H_{aw}	HAW	adiabatic wall enthalpy
H_t	HT	freestream total enthalpy
H_{wi}	HW	enthalpy based on model wall temperature for given T/C location at initial time
h	H	heat-transfer coefficient at model wall for given T/C location
h_{ref}	HREF	stagnation-point heat-transfer coefficient for reference sphere
$h/h_{ref}(X.XXX)$	H/HREF(X.XXX)	ratio of model heat-transfer coefficient to heat-transfer coefficient of reference sphere for $H_{aw}/H_t = X.XXX$ (1.0, 0.9, 0.85)
L	LENGTH	model reference length
M_∞	MACH	freestream Mach number
\dot{q}_i	QDOT	heat-transfer rate at model wall for given T/C location at initial time
\dot{q}_s	QREF	stagnation-point heat-transfer rate for reference sphere at initial time
P_t	PT	freestream total pressure

NOMENCLATURE (Continued)

<u>PLOT SYMBOL</u>	<u>MNEMONIC</u>	<u>DESCRIPTION</u>
R _s	RS	reference sphere radius at model scale equivalent to 0.305 m (1 ft.) for full-scale vehicle
Re _∞ /ft	RN/FT	freestream Reynolds number per foot
	RN/L	nominal Reynolds number per foot $\times 10^{-6}$
Re _{∞,L}	REL	freestream Reynolds number based on model reference length, L
St(X.XXX)	STN NO(X.XXX)	Stanton number based on freestream flow conditions and the model heat-transfer coefficient for H _{aw} /H _t = X.XXX (1.0, 0.9, 0.85)
T		temperature
T _t	TT	freestream total temperature
T _{t_{avg}}	TTAV	average freestream total temperature
T _{w_i}	TW	model wall temperature for given T/C location at initial time
T/C	T/C NO	thermocouple
t		time
t _i	TIME	initial time (before model insertion into flow) extrapolated from F(T _w) vs. time
u		velocity
w		density of model skin material

Pressure Portion of Test

C _{p_n}	CPN	pressure coefficient using measured model static pressure, freestream static pressure, and freestream dynamic pressure for orifice n
----------------------------	-----	--

NOMENCLATURE (Continued)

<u>PLOT SYMBOL</u>	<u>MNEMONIC</u>	<u>DESCRIPTION</u>
$C_{P_{MAX}}$	CPMAX	maximum pressure coefficient, using total pressure across a normal shock, freestream static pressure and freestream dynamic pressure
$C_{P_N}/C_{P_{MAX}}$	CPN/CPMAX	ratio of model local pressure coefficient to the stagnation pressure coefficient
P_∞	PINF	test section static pressure
P_n	PN	model static pressure for orifice n
P/P_∞	P/PINF	ratio of model local pressure to freestream static pressure
P_{STAG}	PT2	stagnation pressure downstream of a normal shock
P_{STAG}/P_{T_1}	PT2PT1	ratio of stagnation pressure behind normal shock to stagnation pressure forward of normal shock
P/P_{STAG}	P/PT2	ratio of model local pressure to stagnation pressure behind a normal shock
P/P_t	P/PT	ratio of model local pressure to total pressure
q_∞	QINF	test section dynamic pressure
R_e	RN/FT	test section Reynolds No. per foot
T_0	TO	test section total temperature
T_∞	TINF	test section static temperature
V_∞	VINF	freestream air velocity
α	ALPHA-MODEL	model angle-of-attack
α_s	ALPHA SECTOR	angle of the strut sector
δ_e	ELEVON	elevon deflection angle

NOMENCLATURE (Concluded)

<u>PLOT SYMBOL</u>	<u>MNEMONIC</u>	<u>DESCRIPTION</u>
γ	GAMMA	ratio of specific heats
μ_∞	MUINF	test section air viscosity
ϕ	PHI	model roll attitude
ρ_∞	RHO	test section air density

Subscripts

aw	adiabatic wall
i	initial value before model insertion into tunnel flow
PG	perfect gas (calorically and thermally perfect gas)
s	reference sphere
t	freestream total condition
w	wall
∞	freestream
1	conditions upstream of shock
2	conditions downstream of shock

CONFIGURATIONS INVESTIGATED

Model 93-0 is a flat plate with a .04-scale simulation of the orbiter elevon-elevon stub region and an approximately .03-scale simulation of the elevon-fuselage region. The model was instrumented to measure heating and pressure distributions in and around the elevon-elevon and elevon-fuselage gap regions with variations of elevon deflection, flat plate angle-of-attack, Reynolds number and boundary layer state.

The width of the model was eleven inches and the overall length was variable. Four different lengths of flat plate ahead of the hinge line was used. The flat plate lengths were 3.6, 6, 7.8, and 14.4 inches. The flat plate thickness was .04-scale of the full scale wing thickness on the wing elevon hinge line at the center of the elevon-elevon stub. The elevon-fuselage gap simulation used this same thickness and was approximately .03-scale.

The leading edge wedge is made of 17-4 stainless steel with a 23 degree wedge angle and a 0.010 inch radius.

Side plates were used to give two dimensional flow. The model was mounted to the side plates which were in turn attached to strut assembly.

The elevon-elevon portion of the model was a .04-scale reproduction of the orbiter elevon stub region. The elevon and elevon stub thickness and chord were simulated. The elevons were deflected to +5 and -10 degrees from 0 degrees. This was accomplished with hinge brackets. The elevon-elevon gap of .02 inches, model scale, was used. The elevon-elevon gap

CONFIGURATIONS INVESTIGATED (Concluded)

angle used was 7 degrees.

The fuselage-elevon simulation used the same left elevon of the elevon-elevon simulation plus a partial simulation of the fuselage on the right side of the stub area. The scale was approximately .03. The fuselage was simulated for 1.5 inches forward of the elevon hinge line and 2 inches above the lower surface of the elevon. The lower fuselage contour in the elevon area was simulated. The elevon deflections of 0, 10, and -10 degrees were used for the fuselage-elevon simulation. A fuselage-elevon gap size of 0.143 inches was used. A 16 degree elevon gap angle was used in the fuselage-elevon simulation.

Model 93-0 nomenclature is as follows:

Configuration

EE/T	Elevon-Elevon Simulation Thermocouple
EE/P	Elevon-Elevon Simulation Pressure
FE/T	Fuselage-Elevon Simulation Thermocouple
FE/P	Fuselage-Elevon Simulation Pressure

Variables

δ_e	Elevon Deflection Angle-Degrees
L	Length of Model-Inches
RN	Reynolds Number
α	Model Angle-of-Attack

INSTRUMENTATION

Model instrumentation consisted of 5-mil chromel-constantan thermocouples and static pressure orifices. (Tables IV through IX and Figures 2a through 2g give the locations of the instrumentation.)

The thermocouples were installed on 17-4 stainless steel thin-skin sections of the flat plate lower surface elevon, and fuselage simulations. The thin-skin thickness was a nominal 0.015 inches within a 0.25 inch radius of any thermocouple. The actual skin thickness is given in Tables IV through VI. Each thermocouple has 50 feet of lead so it can be hooked up to the junction box at the west end of the test section.

Static pressure measurements were made during separate runs from the temperature data runs. The pressure orifice locations are generally the same as the thermocouple locations. The pressure orifices were connected to individual transducers via 100 inch lengths of .064" O. D. stainless steel tubing routed through the side plates and strut assembly. The transducers were provided by the tunnel.

TEST FACILITY DESCRIPTION

The NASA-Ames 3.5-foot Hypersonic Wind Tunnel is a closed-circuit, blowdown-type tunnel capable of operating at nominal Mach numbers of 5, 7, and 10 at pressures to 1800 psia and temperatures of 3400°R for run times to four minutes. The major components of the facility include a gas storage system where the test gas is stored at 3000 psi, a storage heater filled with aluminum-oxide pebbles capable of heating the test gas to 3400°R, axisymmetric contoured nozzles with exit diameters of 42 inches for generating the desired Mach number, and a 900,000 ft³ vacuum storage system which operates to pressures of 0.3 psia. The test section itself is an open-jet type enclosed within a chamber approximately 12-feet in diameter and 40-feet in length, arranged transversally to the flow direction.

A model support system is provided that can pitch models through an angle-of-attack range of -20 to +20 degrees, in a vertical plane, about a fixed point of rotation on the tunnel centerline. This rotation point is adjustable from 1 to 5 feet from the nozzle exit plane. The model normally is out of the test stream (strut centerline 37 inches from tunnel centerline) until the tunnel test conditions are established after which it is inserted. Insertion time is adjustable to as little as 1/2 second and models may be inserted at any strut angle.

A high-speed, analog-to-digital data acquisition system is used to record test data on magnetic tape. The present system is equipped to measure and record the outputs from 80 transducers in addition to 20 channels of tunnel parameters.

TEST PROCEDURE

Heat transfer data were obtained by measuring the temperature rise over a period of time. The model was injected into the flow in approximately 1 second and held on tunnel centerline for approximately 1 second. Temperature measurements and tunnel conditions were recorded on magnetic tape at 0.07-second intervals by the data acquisition system from the start of model injection to the start of model retraction.

The thermocouple leads were routed from the model through the tunnel model-injection mechanism, and connected to a junction box which was wired directly to a thermocouple reference-temperature (150°F) box. The junction box connectors were wrapped with asbestos for heat protection from the tunnel test-chamber ambient conditions (no freestream flow on box). Prior to testing, a thermocouple heat-response check, through the data-acquisition system, was performed on all thermocouples to assure proper hookup, polarity and response.

Static pressure data were obtained by recording the pressures from start of model injection until the model was withdrawn from the flow. Upon examination of the data, it appeared that pressures from some of the taps on the fuselage side of the model did not stabilize in the test period. A longer test period was then used, but that seemed to introduce an effect due to heating. With careful examination of the data, however, it was possible to find stabilized pressure levels during the run and before any heating effects. Specific data frame numbers in this stabilized period were used on the final data presentation. Model time

TEST PROCEDURE (Concluded)

on tunnel centerline was tried at 20, 10 and 5 seconds. The 10 second period was used through most of the test.

The tubing connecting the pressure orifices with the transducers was routed through the side plates and down the support system. Some problems were encountered in leak-checking the orifice-tubing-transducer system. The system was disconnected just in front of the transducers and then leak-checked on both sides. These checks showed no leaks, so the system was reassembled and assumed to be leak-tight.

DATA REDUCTION*

Thermocouple Data

All test data were reduced at the NASA Ames Research Center using the data reduction techniques outlined below. The thermocouple data were reduced using the one-dimensional, thin-wall equation:

$$\dot{q} = WCb \frac{dT_w}{dt} = h (H_{aw} - H_w) = hH_t \left(\frac{H_{aw}}{H_t} - \frac{H_w}{H_t} \right) \quad (1)$$

which neglects heat-conduction losses.

Assuming that W and h are constant and

$$C = C_0 + C_1 T_w + C_2 T_w^2 \text{ for } T_w \text{ ranges} \quad (2)$$

the integration of equation (1) for $t = t_i$ to t and $T_w = T_{wi}$ to T_w yields the linear equation:

$$\begin{aligned} f(T_w) &= -\ln \left(\frac{T'_{aw} - T_w}{T'_{aw} - T_{wi}} \right) - \left[\frac{C_1}{C'_{aw}} + \frac{C_2}{C'_{aw}} \left(T'_{aw} + \frac{T_w + T_{wi}}{2} \right) \right] (T_w - T_{wi}) \\ &= \frac{h c_p}{W C'_{aw} b} (t - t_i) \end{aligned} \quad (3)$$

where it is defined that:

$$T'_{aw} = \frac{H_{aw}}{c_p} = \frac{H_{aw}}{H_t} \frac{H_t}{c_p} \geq (T_{aw})_{PG} \quad (4)$$

$$\begin{aligned} C'_{aw} &= C_0 + C_1 T'_{aw} + C_2 T'_{aw}^2 \\ &\neq \text{specific heat at adiabatic wall temperature} \end{aligned} \quad (5)$$

The form of Eq. (3) is $f(T_w) = mt + a$ where m is the slope and a is the intercept for a straight line if heat-conduction errors are negligible. Thus, deviations from a straight line can indicate heat-conduction effects.

* Data Reduction section provided by William K. Lockman,
NASA Ames Research Center.

DATA REDUCTION (Continued)

The slope, m , of $f(T_w)$ vs t from Eq. (3) is computed by a least-squares, straight-line fit over a finite time interval (approximately one second) beginning when the model reaches uniform tunnel flow. The value of the heat-transfer coefficient, h , is then determined from:

$$h = \frac{WC_{aw}^i b}{c_p} m \quad (6)$$

Using this value of h , the heat-transfer rate is evaluated at the initial time, t_i , when the model is isothermal at the initial wall enthalpy, H_{wi}

$$\dot{q} = \dot{q}_i = h (H_{aw} - H_{wi}) = h H_t \left(\frac{H_{aw}}{H_t} - \frac{H_{wi}}{H_t} \right) \quad (7)$$

where H_{aw}/H_t is the same value used to evaluate h . The resultant value of \dot{q} is independent of the value of H_{aw}/H_t used for both the h and \dot{q} evaluations.

The reference sphere heating is also evaluated at the initial wall enthalpy by the method of Fay and Riddel:

$$\dot{q}_s = h_s (H_t - H_{wi}) = h_s H_t \left(1.0 - \frac{H_{wi}}{H_t} \right) \quad (8)$$

The model-to-sphere ratio of heat-transfer coefficients is then determined from Eqs. (7) and (8) as

$$\frac{h}{h_s} = \frac{\dot{q}_i}{\dot{q}_s} \left[\frac{1.0 - \frac{H_{wi}}{H_t}}{\frac{H_{aw}}{H_t} - \frac{H_{wi}}{H_t}} \right] \quad (9)$$

where \dot{q}_i is constant for all values of H_{aw}/H_t . To determine h/h_s for various values of H_{aw}/H_t , the particular value of H_{aw}/H_t is substituted

DATA REDUCTION (Continued)

into Eq. (9).

The Stanton number is defined as

$$St = \frac{h}{\rho_u} = \frac{\dot{q}_i}{\rho_u(H_{aw} - H_{wi})} \quad (10)$$

where for freestream conditions, $\rho_u = \rho_\infty V_\infty$.

The calculations of the model heating, reference sphere heating, and Reynolds number included the corrections of NACA report 1135 for calorically imperfect, thermally perfect air. Keyes' equation for viscosity was also used for the sphere heating and Reynolds number computations:

$$\mu = \frac{0.0232 \times 10^{-6} T^{0.5}}{1 + \frac{220}{T} \times 10^{-9}/T}$$

where the units for T and μ are $^{\circ}\text{R}$ and lb-sec/ft., respectively.

Pressure Data

Calculate CPN/CPMAX

$$CP_n = \frac{P_n - P_\infty}{q_\infty}$$

$$CP_{MAX} = \frac{P_{STAG} - P_\infty}{q_\infty}$$

DATA REDUCTION (Concluded)

where:

$$P_{T_2} = P_{STAG} = \left(P_{T_\infty} \right) \frac{\left[\frac{\gamma + 1}{2} M_\infty^2 \right]^{\frac{\gamma}{\gamma - 1}}}{\left[1 + \frac{\gamma - 1}{2} M_\infty^2 \right]^{\frac{+1}{\gamma - 1}}} \cdot \frac{\left[\frac{2\gamma}{\gamma + 1} M_\infty^2 - \frac{\gamma - 1}{\gamma + 1} \right]^{\frac{+1}{\gamma - 1}}}{\left[\frac{2\gamma}{\gamma + 1} M_\infty^2 + \frac{\gamma - 1}{\gamma + 1} \right]^{\frac{\gamma}{\gamma - 1}}}$$

$$\frac{CP_n}{CP_{MAX}} = \frac{P_n - P_\infty}{P_{STAG} - P_\infty} \quad \text{or:}$$

$$\frac{CP_n}{CP_{MAX}} = \frac{\frac{P_n}{P_\infty} - 1}{\left[\left(\frac{\gamma + 1}{2} M_\infty^2 \right)^{\frac{\gamma}{\gamma - 1}} \right] - 1} \cdot \frac{1}{\left[\left(\frac{2\gamma}{\gamma + 1} M_\infty^2 - \frac{\gamma - 1}{\gamma + 1} \right)^{\frac{+1}{\gamma - 1}} \right] - 1}$$

REFERENCES

1. Fay, J. A., and Riddell, F. R., "Theory of Stagnation Point Heat Transfer in Dissociated Air," *J. Aeron. Sci.*, Vol. 25, No. 1, February, 1958, pp 73-85.
2. Ames Research Staff, "Equations, Tables, and Charts for Compressible Flow," NACA Report 1135, 1953.
3. Bertram, Mitchel H., "Comment on 'Viscosity of Air'," *J. Spacecraft and Rockets*, Vol. 4, No. 2, February, 1967, pp 287-288.
4. IL No. SAS-AA&T-75-285, "Model Requirements for Wind Tunnel Test OH58, Elevon-Stub-Elevon Heating," dated November 4, 1975.
5. SL No. SAS/WTO/75-353, "Model Requirements for Wind Tunnel Test OH58, Elevon-Stub-Elevon Heating," dated November 14, 1975.
6. IL No. SAS/WTO/76-054, "Model 93-0 Design Requirements for Test OH58 (Task 77)," dated January 28, 1976.
7. IL No. SAS/WTO/76-031, "Report of the Test OH58 Conference at NASA/ARC," dated March 4, 1976.
8. SL No. SAS/WTO/76-054 Addendum #1, dated April 26, 1976.
9. SL No. SAS/WTO/76-054 Addendum #2, dated April 30, 1976.
10. IL No. SAS-AA&T-77-066, "Revision of Model Requirements for Test OH58," dated March 22, 1977.
11. IL No. SAS/WTO/77-066, "Revised Model Requirements for Model 93-0 (Task 77)," dated May 16, 1977.
12. SL No. SAS/WTO/77-066 Addendum #1.
13. SL No. SAS/WTO/77-066 Addendum #2, dated June 30, 1977.
14. SL No. SAS/WTO/77-066 Addendum #3, dated August 23, 1977.
15. SD78-SH-0040, "Information for Elevon/Elevon and Elevon/Fuselage Heating Distribution Tests of Model 93-0 in the Ames Research Center 3.5-Foot Hypersonic Wind Tunnel Test OH58," dated February 2, 1978.
16. IL No. SAS/WTO/78-078, "Results of Test OH58 at NASA/Ames Research Center," dated May 30, 1978.

REFERENCES (Concluded)

17. SS-H01713, "Tunnel Installation #93-0, .10 Scale SSV Elevon/Stub/Elevon Blockage Model."
18. SS-H01714, "Model Assy. - .10 Scale Elevon/Stub/Elevon Tunnel Blockage 93-0."
19. SS-H01890, "Model Assy. & Details, .04 Scale SSV 393-0," Sheet 1 of 2.

TABLE I.

TEST :	OH58	DATE :	2/2/78	
TEST CONDITIONS				
MACH NUMBER	REYNOLDS NUMBER (per foot)	DYNAMIC PRESSURE (pounds/sq. inch)	STAGNATION TEMPERATURE (degrees Rankine)	
7.3	0.5×10^6	1.338	1540	
7.3	0.75×10^6	2.006	1540	
7.3	1.0×10^6	2.676	1540	
7.3	1.5×10^6	4.013	1540	
7.3	3.0×10^6	8.027	1540	
BALANCE UTILIZED: <u>NONE</u>		CAPACITY:	ACCURACY:	COEFFICIENT TOLERANCE:
NF	_____	_____	_____	_____
SF	_____	_____	_____	_____
AF	_____	_____	_____	_____
PM	_____	_____	_____	_____
RM	_____	_____	_____	_____
YM	_____	_____	_____	_____
COMMENTS:				

TEST : $\phi H 50$

TABLE IIIa.

DATA SET/RUN NUMBER COLLATION SUMMARY

DATE :

DATA SET IDENTIFIER	CONFIGURATION	SCHD.	PARAMETERS/VALUES				NO. OF RUNS	RUN NUMBERS		
			α	β	M	L	S_e	m/L	C_{STAB}	
R2XH01	ELEVdn/ELEVn-TC	30	0	7.3	7.8	0	0.5	103		1
02						5				6
03					-10					11
04					0	0.75				2
05					5					9
06					-10					12
07					0	1.0				4
08					5					10
09					-10					13
10			400	7.3	6.0	0	0.5	102		17
11					5					20
12					-10					14
13					-10	0.75				15
14					0	1.0				18
15					5					21
16					-10					16
17					-10					19
18					0	3.0				
19										
20										
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										
31										
32										
33										
34										
35										
36										
37										
38										
39										
40										
41										
42										
43										
44										
45										
46										
47										
48										
49										
50										
51										
52										
53										
54										
55										
56										
57										
58										
59										
60										
61										
62										
63										
64										
65										
66										
67										
68										
69										
70										
71										
72										
73										
74										
75										
76										

TEST RUN NUMBERS

H/TH REG SCHEDULES See Page 25 for THERMOCOUPLE COEFFICIENTS
SCH1 EDULIE IDVAR (1) MACHT, H/TH, H/TH TO 1 NOV

a or β IDVAR (2)

B DIS 01 → 31 } HEATING DATA

C DIS 18 - 731 }

TABLE IIa. (Continued)

TEST: PH50

DATA SET/RUN NUMBER COLLATION SUMMARY

DATE:

TEST RUN NUMBERS													
DATA SET IDENTIFIER	CONFIGURATION	SCHD.	PARAMETERS/VALUES					NO. OF RUNS	RUN NUMBERS				
			α	β	M	L	S_e	H	C_{NST}	σ	μ	H_{AW}	H_T
R2X#18	FixLane/Elevtn - TC	100	7.3	14.4	0	0.5	107				1	31	
19						10						30	
20			-10									33	
21			0	0.75								32	
22			10									28	
23			-10									34	
24			0									24	
25			10									26	
26			0	1.0								25	
27			10									29	
28			-10									35	
29			0	1.5								23	
30			1	1.0								27	
31			Y	Y	Y	Y	Y	Y	Y	Y		36	
1	7	13	19	25	31	37	43	49	55	61	67	75 76	
<i>REF</i>													
α OR β													
SCHEDULES													
COEFFICIENTS FOR THE NMIC COUPLE													
IOVAR (1) NOV													
IOVAR (2)													

TABLE IIIa. (Continued)

TEST : $\Phi H 50$

DATA SET/RUN NUMBER COLLATION SUMMARY

DATE :

DATA SET IDENTIFIER	CONFIGURATION	SCHD.	PARAMETERS/VALUES				NO. OF RUNS	TEST RUN NUMBERS
			α	β	M	L		
R2X#32	EURDVN/EURODVN-Mess	3C 0	7.3	7.8	0	0.5	106	1 46
33					5			49
34					-10			54
35					0	0.15		47
36					5			50
37					-10			53
38					0	1.0		48
39					5			51
40			460	7.3	60	-10		52
41					0	0.5	105	38
42					5			41
43					-10			43
44					-10	0.75		44
45					0	1.0		39
46					5			42
47					-10			45
48					0	3.0		40
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
31								
37								
43								
49								
55								
61								
67								
75								
76								

D D/S 32 → 60 }
 # E D/S 32 → 60 } PRESSURE DATA
 SCHEDULES F D/S 49 → 60 }

See Page 25 for COEFFICIENTS THP

IDVAR (1) NOV

IDVAR (11)

IDVAR (12)

TABLE IIIa. (Continued)

TEST: $\Phi H 58$

DATA SET/RUN NUMBER COLLATION SUMMARY

DATA SET IDENTIFIER	CONFIGURATION	SCHD.	PARAMETERS/VALUES				NO. OF RUNS	'RUN NUMBERS
			α	β	M	L		
R2X#49	FUSELAGE/FLOOR(DRIVEN)	3C 0	7.3	14.4	0	0.5	110	1 73
50					10			64
51			-10					69
52			C	0.75				72
53			10					62
54			-10					68
55			0	1.0				71
56			10					61
57			-10					67
58			0	1.5				70
59			10					63
60			V	V	V	V	V	66
7	13	19	25	31	37	43	49	55
								61
								67
								75 76

α OR β
SCHEDULES

See Page 25 for
COEFFICIENTS
SCHEDULE

IOVAR (1) IOVAR (2) NDV

TABLE IIa (Continued)

OH58 THERMOCOUPLE AND PRESSURE TAP SCHEDULE

R2XA01 → 31 DATASETS -

THERMOCOUPLES — 1 → 12, 14 → 19, 21 → 25, 27 → 32
TABLE IV FOR LOCATION

R2XB01 → 31 DATASETS -

THERMOCOUPLES — 75 → 88
TABLE VI FOR LOCATION

R2XC18 → 31 DATASETS -

THERMOCOUPLES — 39 → 43, 45 → 49, 51 → 55, 57 → 74
TABLE V FOR LOCATION

R2XD32 → 60 DATASETS -

PRESSURE TAPS — 101 → 126
TABLE VII FOR LOCATION

R2XE32 → 60 DATASETS -

PRESSURE TAPS — 168 → 179
TABLE IX FOR LOCATION

R2XF49 → 60 DATASETS -

PRESSURE TAPS — 132 → 136, 138 → 142, 144 → 148, 150 → 167
TABLE VIII FOR LOCATION

TEST : OH58

TABLE IIa. (Concluded)

DATA SET IDENTIFIER	PARAMETERS VARIED				REYNOLDS NUMBER/FOOT X 10 ⁶				DATE :	
	α	β	MACH LENGTH (IN.)	δ_e DEG.	CONSTANT	0.5	0.75	1.0	1.5	
TEST RUN NUMBERS										
Elevon/Elevon - TC	30	0	7.3	7.8	0	103	1	2	4	
					5		6	9	10	
					-10	11	12	13		
	40		6.0	-10	102	14	15	16		
				0		17	18	19		
				5	20	21				
Fuselage/Elevon-TC	30		14.4	0	107	31	24	32	25	23
				10		30	26	28	29	27
				-10		33	34	35	36	
Elevon/Elevon-Press. 40		6.0	0	105	38	39	40			
			5		41	42				
			-10		43	44	45			
	30		7.8	0	106	46	47	48		
				5	49	50	51			
			-10		54	53	52			
Fuselage/Elevon-Press 30		14.4	0	110	73	72	71	70		
			10		64	62	61	63		
			-10		69	68	67	66		
	7	13	19	25	31	37	43	49	55	61
										67
										75 76
COEFFICIENTS										
SCHEDULES										

α OR β
SCHEMES

IDVAR (1) IDVAR (2) NDV

NASA-MSFCAAF

TABLE IIb.

TEST: RUN NO.:	QH58 CONFIGURATION EE/T	LENGTH INCHES	δ_e DEGREES	α DEGREES	CONSTANT SET	M_∞	Re_∞ / FT $X 10^5$	P_t PSIA	T_t OR	DATE:
TEST RUN NUMBERS										
1		7.8	0	30	103	7.3	0.5	194	1540	
2			0				0.75	291		
4			0				1.0	388		
6			5				0.5	194		
9			5				0.75	291		
10			5				1.0	388		
11			-10				0.5	194		
12			-10				0.75	291		
13		7.8	-10	30	103		1.0	388		
14		6.0	-10	40	102		0.5	194		
15			-10				0.75	291		
16			-10				1.0	388		
17			0				0.5	194		
18			0				1.0	388		
19			0				3.0	1164		
20			5				0.5	194		
21	EE/T	6.0	5	40	102		1.0	388		
23	EE/T	14.4	0	30	101	7.3	1.5	582	1540	
7		13	19	25	31	37	43	49	55	67
										7576
COEFFICIENTS										
IDVAR (1) IDVAR (2) NDV										
α OR β SCHEDULES										

TABLE IIb. (continued)

TEST :	QH58	DATA SET/RUN NUMBER COLLATION SUMMARY										DATE :
RUN NO.	CONFIGURATION	LENGTH INCHES	δ_e DEGREES	α DEGREES	CONSTANT SET	M_∞	$Re_\infty / FT X 10^6$	P_t PSIA	P_t OR	COEFFICIENTS	SCHEDULES	
24	FE/T	14.4	0	30	107	7.3	0.75	291	1540			
25			0					1.00	388			
26			10				0.75	291				
27			10				1.5	582				
28			10				0.75	291				
29			10				1.0	388				
30			10				0.5	194				
31			0				0.5	194				
32			0				0.75	291				
33			-10				0.5	194				
34			-10				0.75	291				
35			-10				1.0	388				
36	FE/T	14.4	-10	30	107		1.5	582				
38	EE/P	6.0	0	40	105		0.5	194				
39			0				1.0	388				
40			0				3.0	1164				
41			5				0.5	194				
42	EE/P	6.0	5	40	105	7.3	1.0	388	1540			
7		13	19	25	31	37	43	49	55	61	67	75 76
												IDVAR (1) IDVAR (2) NOV

NASA-MSC-MAF

TEST : QH58

TABLE IIIb. (Continued)

DATE :

DATA SET/RUN NUMBER COLLATION SUMMARY

RUN NO.	CONFIGURATION	LENGTH INCHES	δ_e DEGREES	α DEGREES	CONSTANT SET	M_∞	$Re_{\infty} \times 10^6$	P_t PSIA	T_t OR	TEST RUN NUMBERS					
										IDVAR (1)	IDVAR (2)	NDV	COEFFICIENTS	SCHEMES	α OR β
43	EE/P	6.0	-10	40	105	7.3	0.5	194	1540						
44		6.0	-10	40	105		0.75	291							
45		6.0	-10	40	105		1.0	388							
46		7.8	0	30	106		0.5	194							
47			0				0.75	291							
48			0				1.0	388							
49			5				0.5	194							
50			5				0.75	291							
51			5				1.0	388							
52			-10				1.0	388							
53			-10				0.75	291							
54	EE/P	7.8	-10		106		0.5	194							
61	FE/P	14.4	10		110		1.0	388							
62			10				0.75	291							
63			10				1.5	582							
64			10				0.5	194							
66			-10				1.5	582							
67	FE/P	14.4	-10	30	110	7.3	1.0	388	1540						
7		13	19	25	31	37	43	49	55	61	67	75	76		

TABLE III. MODEL DIMENSIONAL DATA

MODEL COMPONENT: ELEVON/ELEVON

GENERAL DESCRIPTION: .04 scale replica of the orbiter elevons in the region of the elevon stub.

MODEL SCALE: .04

DRAWING NUMBER: SS-H01890
Contour per Downey Mylar 14414.1

DIMENSIONS:	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Length (Aft of hingeline)		2.859
Thickness (At hingeline)		0.777
Stub Gap		0.200
Gap Angle (Degrees)		7

TABLE III. MODEL DIMENSIONAL DATA (Continued)

MODEL COMPONENT: FUSELAGE/ELEVON

GENERAL DESCRIPTION: .03-scale replica of the orbiter fuselage elevon intersection.

MODEL SCALE: .03

DRAWING NUMBER: SS-H01890

DIMENSIONS:	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Fuselage:		
Length - Forward of hingeline	1.500	
Aft of hingeline	2.859	
Height: (Above elevon upper surface at hingeline	1.398	
Gap	0.143	
Elevon		
Length - Aft of hingeline	2.859	
Thickness - At hingeline	0.777	
-Gap Angle (Degrees)	16	

TABLE III. MODEL DIMENSIONAL DATA (Concluded)

MODEL COMPONENT: FLAT PLATE

GENERAL DESCRIPTION: A leading edge block and three spacers.

MODEL SCALE: None

DRAWING NUMBER: SS-H01890

DIMENSIONS:	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Width		11.000
Leading Edge Angle (Degrees)		23
Thickness (Max.)		1.000
Length (From leading edge to hingeline)		
L.E. Block		3.600
L.E. Block + Spacer - 4		6.000
L.E. Block + Spacer - 5		7.800
L.E. Block + Spacer - 6		14.400

TABLE IV. ELEVON AND STUB THERMOCOUPLES

T/C NO.	SKIN THICKNESS	X (1)	Y (2)	Z (3)
1	0.023	2.675	-0.014	0.280
2	0.023	2.284	-0.020	0.270
3	0.023	1.438	-0.050	0.406
4	0.0235	1.438	-0.015	0.126
5	0.023	1.241	-0.036	0.284
6	0.023	1.055	-0.060	0.461
7	0.0235	1.055	-0.015	0.097
8	0.023	0.862	-0.040	0.288
9	0.0235	0.668	-0.070	0.513
10	0.0238	0.668	-0.015	0.066
11	0.021	0.041	-0.087	0.556
12*	0.020	-0.345	0	0.740
13	NOT USED			
14*	0.020	0.060	0	0.415
15	0.026	2.675	-0.125	0.169
16	0.025	2.284	-0.125	0.109
17	0.022	1.438	-0.125	0.001
*18 on stub	0.0215	1.055	-0.125	-0.028

(1) Distance aft of elevon hingeline.

(2) Distance from stub centerline, positive to the right.

(3) Distance from elevon hingeline, positive above.

TABLE IV. ELEVON AND STUB THERMOCOUPLES (Concluded)

T/C NO.	SKIN THICKNESS		X (1)	Y (2)	Z (3)
19	0.018		0.668	-0.125	-0.059
20		NOT USED			
21	0.028		2.675	-0.375	0.169
22	0.0265		2.284	-0.375	0.109
23	0.023		1.438	-0.375	0.001
24	0.027		1.055	-0.375	-0.028
25	0.0195		0.668	-0.375	-0.059
26		NOT USED			
27	0.022		2.675	-0.182	0.391
28	0.022		2.284	-0.196	0.431
29	0.0215		1.438	-0.213	0.531
30	0.024		1.055	-0.222	0.586
31	0.0265		0.668	-0.244	0.638
32	0.020		0.041	-0.125	0.681
33 → 38		NOT USED			

(1) Distance aft of elevon hingeline.

(2) Distance from stub centerline, positive to the right.

(3) Distance from elevon hingeline, positive above.

TABLE V. FUSELAGE SIMULATION THERMOCOUPLES

T/C NO.	SKIN THICKNESS	X (1)	R (2)
39	.0206	2.699	0.125
40	.0206	2.293	0.125
41	.0205	1.437	0.125
42	.0205	1.064	0.125
43	.0206	0.690	0.125
44	NOT	USED	
45	.0205	2.699	0.375
46	.0206	2.293	0.375
47	.0205	1.437	0.375
48	.0205	1.064	0.375
49	.0205	0.690	0.375
50	NOT	USED	
51	.0205	2.699	0.625
52	.0206	2.293	0.625
53	.0205	1.437	0.625
54	.0205	1.064	0.625
55	.0205	0.690	0.625
56	NOT	USED	
57	.0205	2.699	0.875

(1) Distance aft of elevon hingeline.

(2) Distance above elevon lower loft line.

TABLE V. FUSELAGE SIMULATION THERMOCOUPLES (Concluded)

T/C NO.	SKIN THICKNESS	X (1)	R (2)
58	.0205	2.293	0.875
59	.0205	1.437	0.875
60	.0205	1.064	0.875
61	.0205	0.690	0.875
62	.0205	0	0.875
63	.0205	2.699	1.125
64	.0205	2.293	1.125
65	.0204	1.437	1.125
66	.0204	1.064	1.125
67	.0205	0.690	1.125
68	.0206	0	1.125
69	.0204	2.699	1.375
70	.0204	2.293	1.375
71	.0204	1.437	1.375
72	.0204	1.064	1.375
73	.0205	0.690	1.375
74	.0205	0	1.375

(1) Distance aft of elevon hingeline.

(2) Distance above elevon lower loft line.

TABLE VI. FLAT PLATE LOWER SURFACE THERMOCOUPLES

T/C NO.	SKIN THICKNESS	X (1)				Y (2)
		L=3.6 (3)	L=6.0 (3)	L=7.8 (3)	L=14.4 (3)	
75	.032	0.9	0.9	0.9	0.9	0
76	.032	1.5	1.5	1.5	1.5	0
77	.032	1.875	1.875	1.875	1.875	0
78	.029	--	3.0	3.0	3.0	0
79	.033	--	--	3.9	--	0
80	.033	--	--	5.85	--	0
81	.033	--	--	--	3.6	0
82	.033	--	--	--	7.2	0
83	.033	--	--	--	10.8	0
84	.028	2.1	4.5	6.3	12.9	0
85	.028	2.7	5.1	6.9	13.5	0
86	.029	3.35	5.75	7.55	14.15	-0.25
87	.028	3.35	5.75	7.55	14.15	0
88	.027	3.35	5.75	7.55	14.15	+0.25

(1) Distance aft of leading edge.

(2) Distance from plate centerline - positive to the right.

(3) Distance elevon hingeline is aft of leading edge.

TABLE VII. ELEVON PRESSURES

PRESSURE NO.	X (1)	Y (2)	Z (3)	PRESSURE NO.	X (1)	Y (2)	Z (3)
101	2.705	-0.013	0.280	115	0.050	-0.089	0.292
102	2.295	-0.023	0.316	116	2.627	-0.147	0.426
103	2.295	-0.010	0.205	117	2.217	-0.162	0.464
104	1.437	-0.044	0.410	118	1.437	-0.192	0.563
105	1.437	-0.026	0.263	119	1.063	-0.218	0.618
106	1.437	-0.010	0.119	120	0.690	-0.205	0.673
107	1.063	-0.058	0.444	121	0.050	-0.169	0.672
108	1.063	-0.033	0.270	122	2.627	-0.128	0.132
109	1.063	-0.013	0.102	123	2.217	-0.128	0.075
110	0.690	-0.068	0.528	124	1.437	-0.133	-0.022
111	0.690	-0.050	0.373	125	1.063	-0.128	-0.053
112	0.690	-0.033	0.227	126	0.690	-0.128	-0.079
113	0.690	-0.013	0.068	127 - 131	NOT USED		
114	0.050	-0.089	0.541				

(1) Distance aft of elevon hingeline.

(2) Distance from stub centerline - positive to the right.

(3) Distance from elevon hingeline - positive above.

TABLE VIII. FUSELAGE SIMULATION PRESSURES

PRESSURE NO.	X (1)	R (2)	PRESSURE NO.	X (1)	R (2)
132	2.699	0.125	150	2.699	0.875
133	2.293	0.125	151	2.293	0.875
134	1.437	0.125	152	1.437	0.875
135	1.064	0.125	153	1.064	0.875
136	0.690	0.125	154	0.690	0.875
137	NOT USED		155	0	0.875
138	2.699	0.375	156	2.699	1.125
139	2.293	0.375	157	2.293	1.125
140	1.437	0.375	158	1.437	1.125
141	1.064	0.375	159	1.064	1.125
142	0.690	0.375	160	0.690	1.125
143	NOT USED		161	0	1.125
144	2.699	0.625	162	2.699	1.375
145	2.293	0.625	163	2.293	1.375
146	1.437	0.625	164	1.437	1.375
147	1.064	0.625	165	1.064	1.375
148	0.690	0.925	166	0.690	1.375
149	NOT USED		167	0	1.375

(1) Distance aft of elevon hingeline.

(2) Distance above elevon lower loft line.

TABLE IX. FLAT PLATE LOWER SURFACE PRESSURES

PRESSURE NO.	X (1)				Y (2)
	(3) L=3.6	(3) L=6.0	(3) L=7.8	(3) L=14.4	
168	0.9	0.9	0.9	0.9	0.25
169	1.5	1.5	1.5	1.5	0.25
170	1.875	1.875	1.875	1.875	0.25
171	--	3.0	3.0	3.0	0.25
172	--	--	3.9	--	0.25
173	--	--	5.85	--	0.25
174	--	--	--	3.6	0
175	--	--	--	7.2	0
176	--	--	--	10.8	0
177	2.1	4.5	6.3	12.9	0.25
178	2.7	5.1	6.9	13.5	0.25
179	3.1	5.5	7.3	13.9	0

(1) Distance aft of leading edge.

(2) Distance from plate centerline - positive to the right.

(3) Distance elevon hingeline is aft of leading edge.

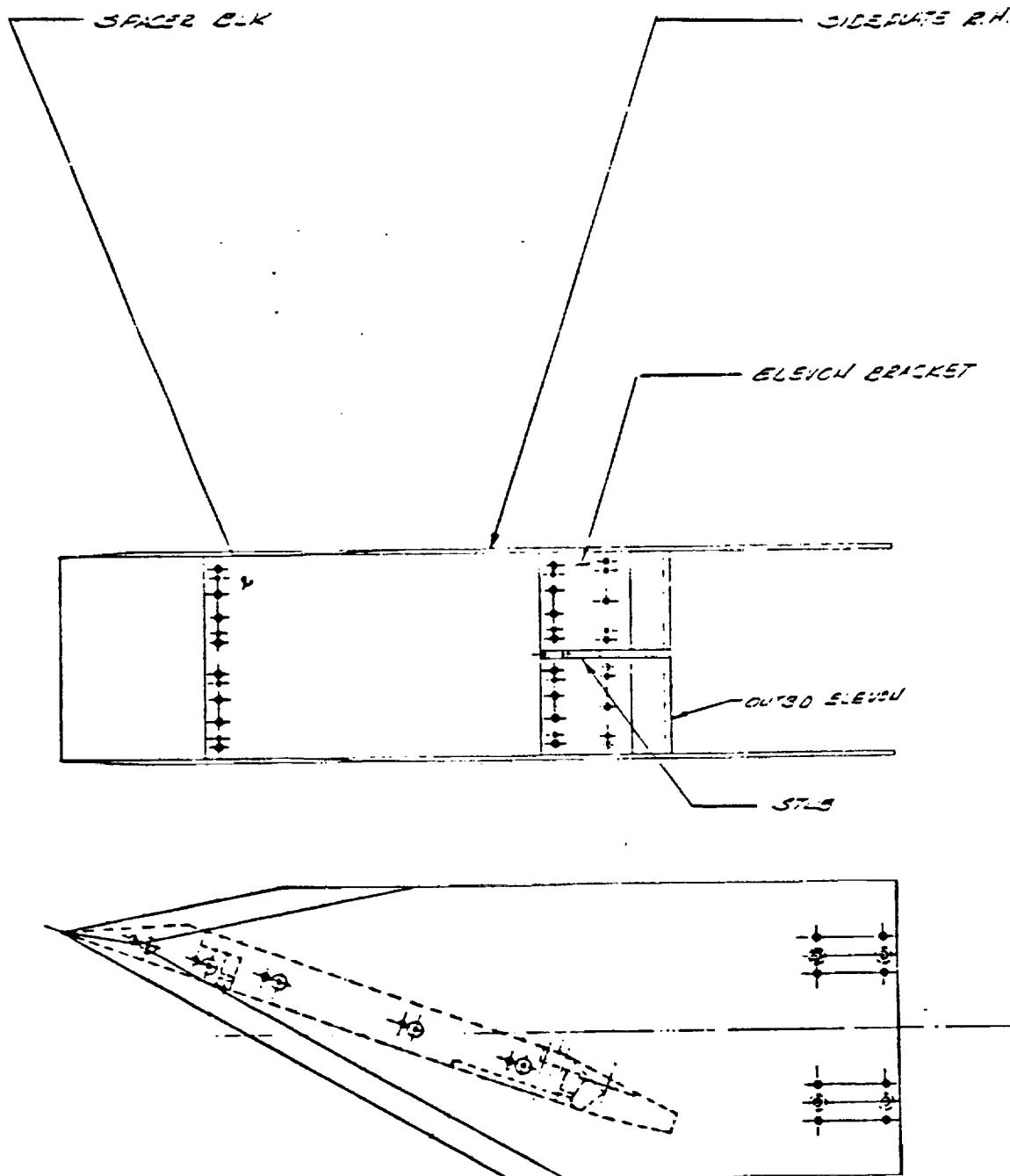
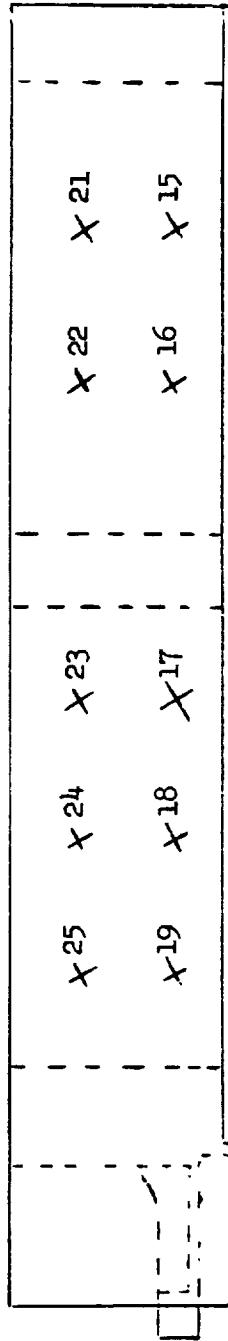
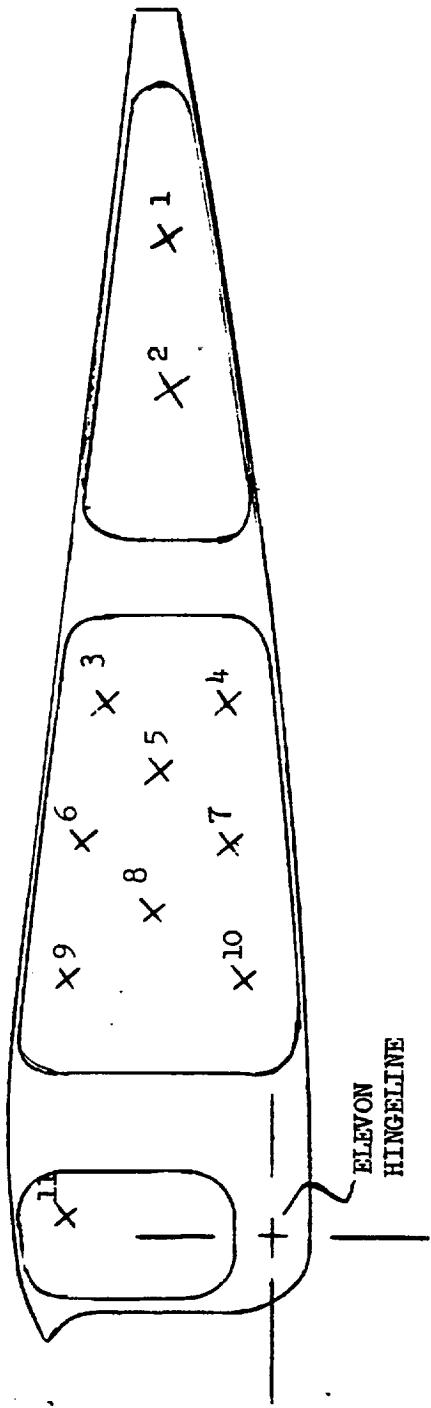
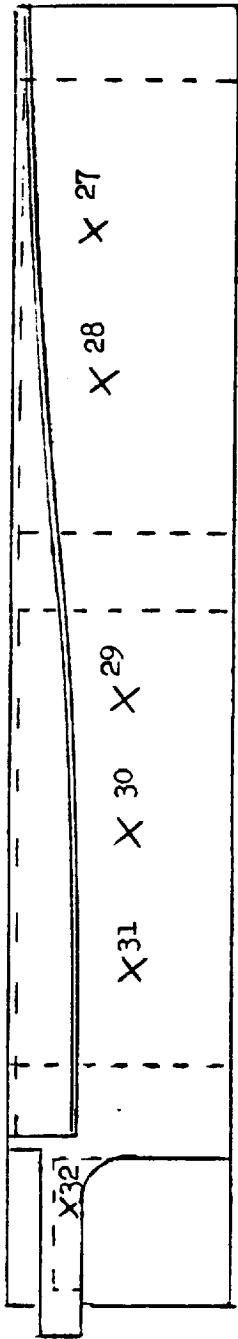
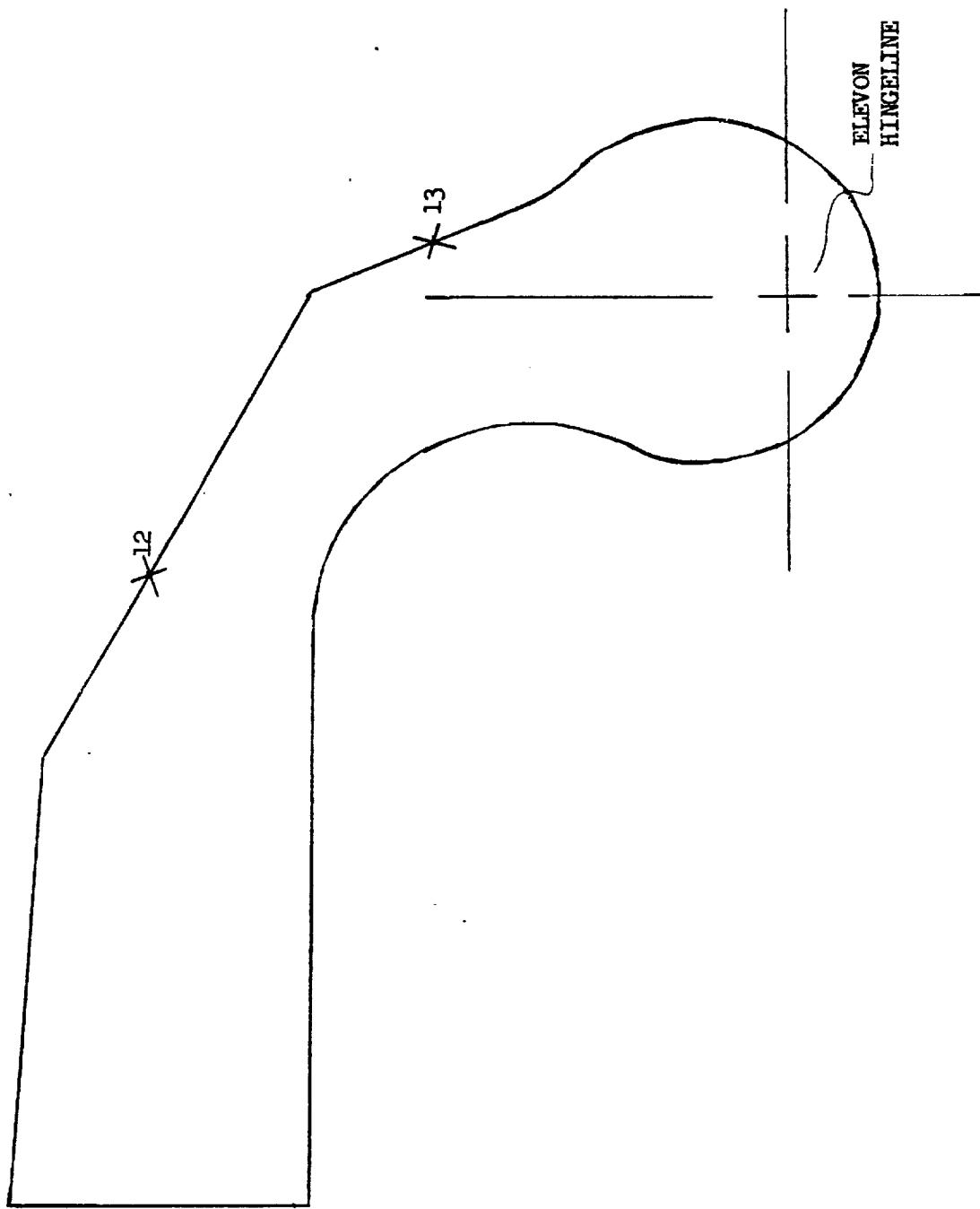


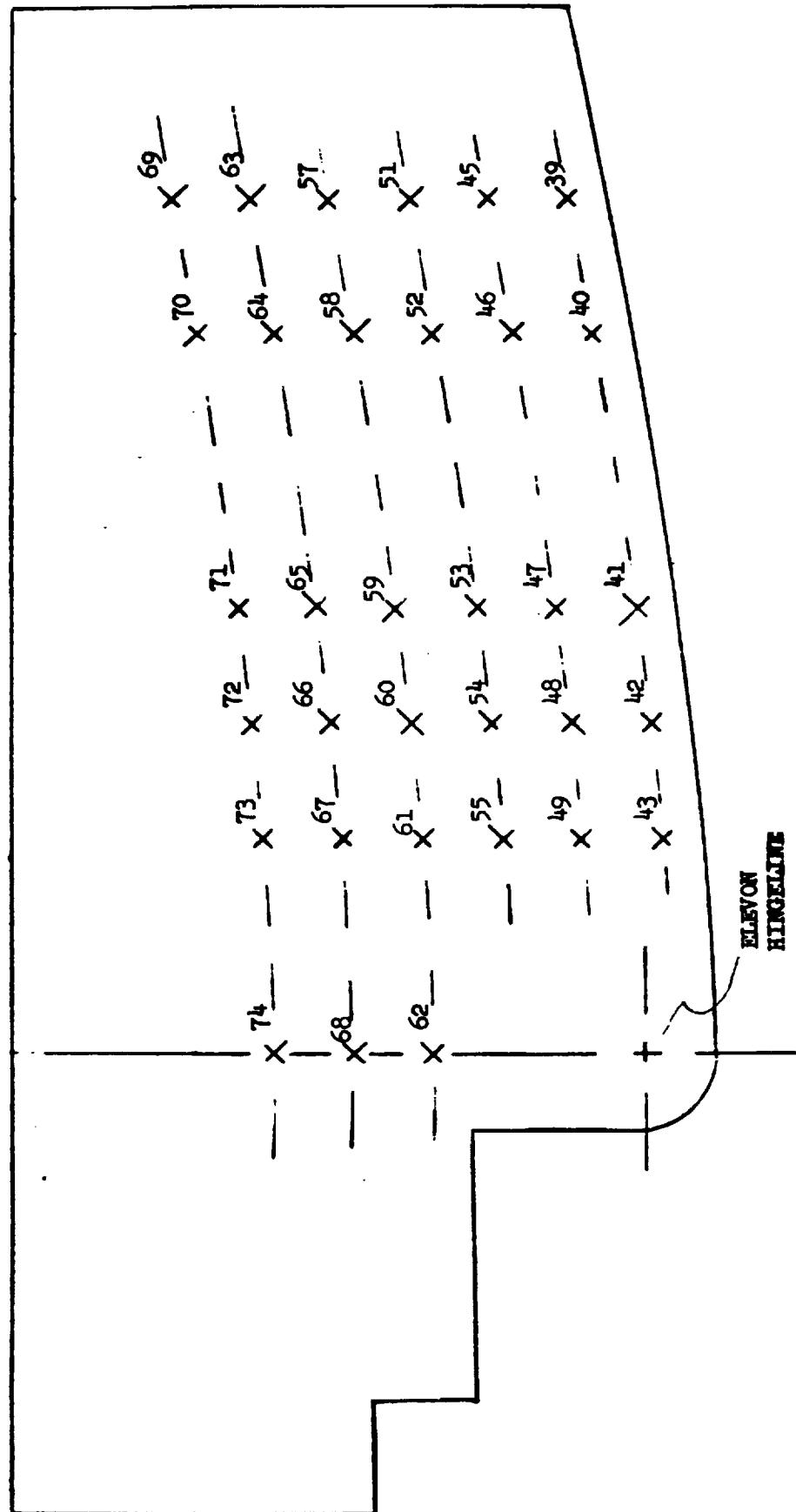
Figure 1. General model configuration.



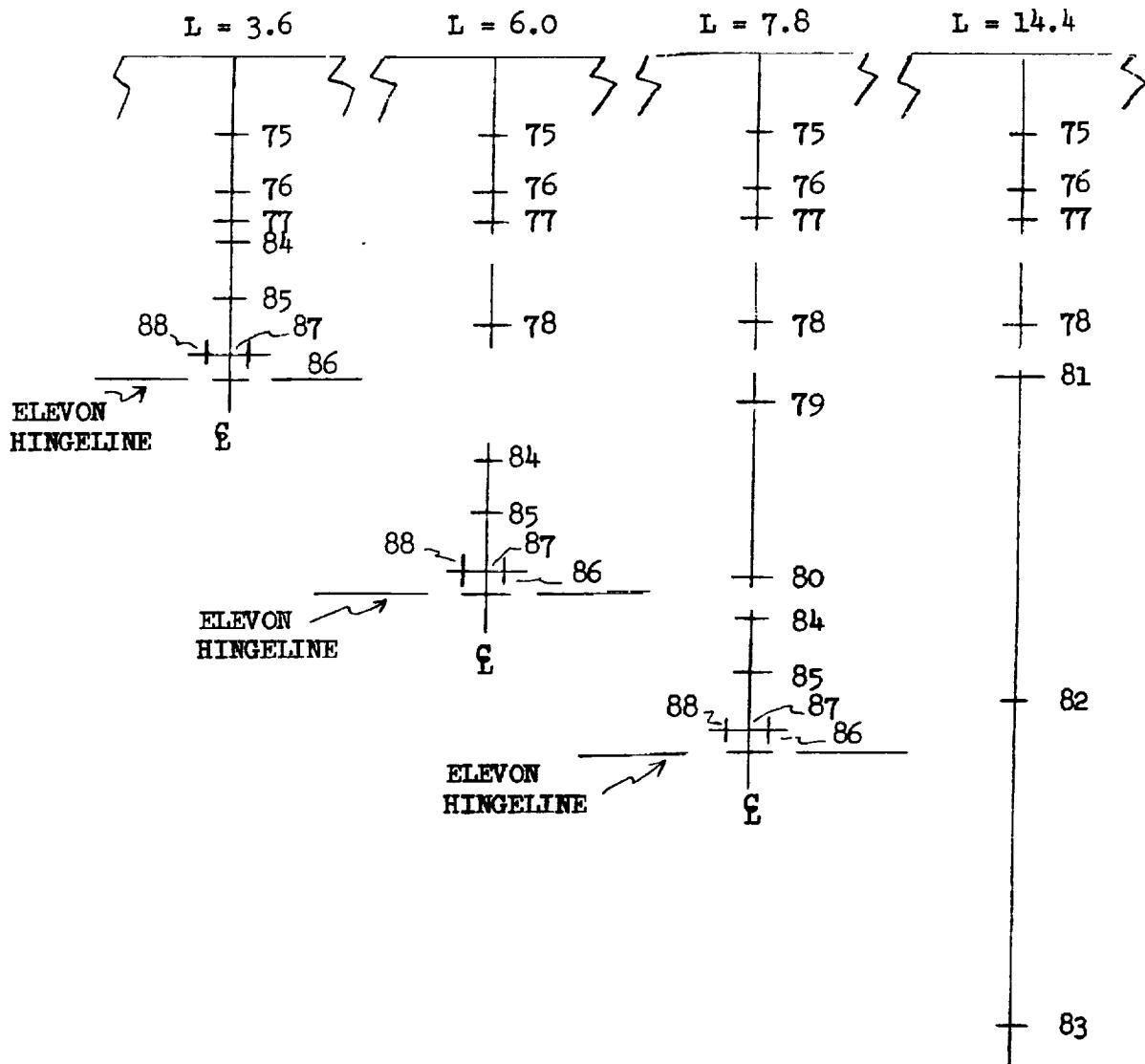
a. Elevon Thermocouples
Figure 2. Model sketches.



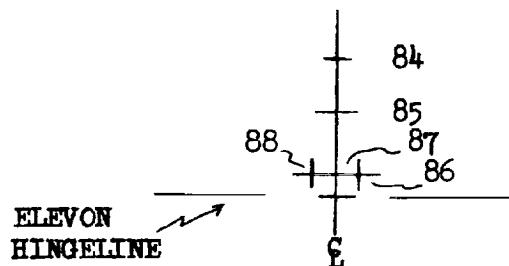
b. Stub Thermocouples
Figure 2. Continued.



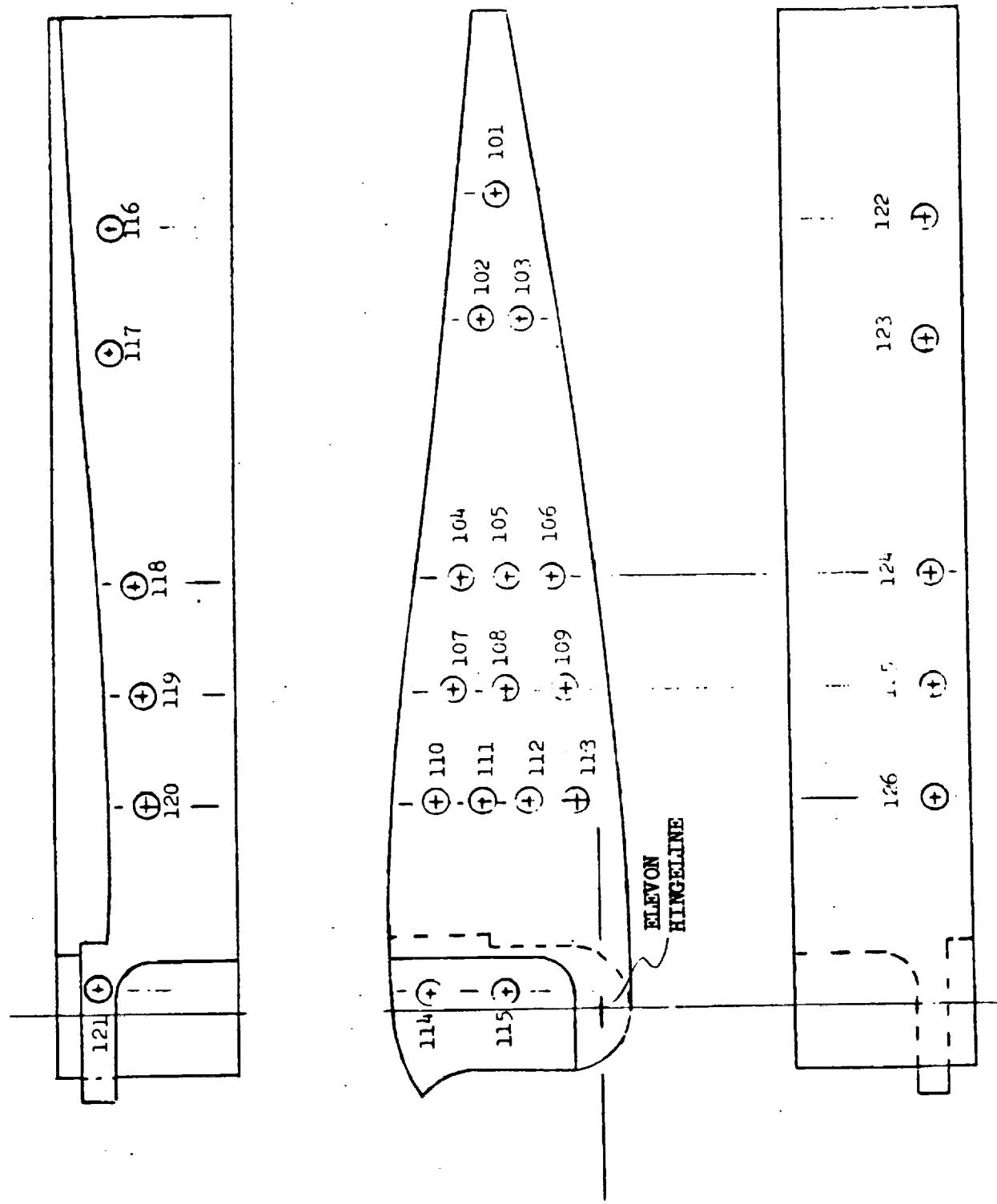
c. Fuselage Simulation Thermocouples
Figure 2. Continued.



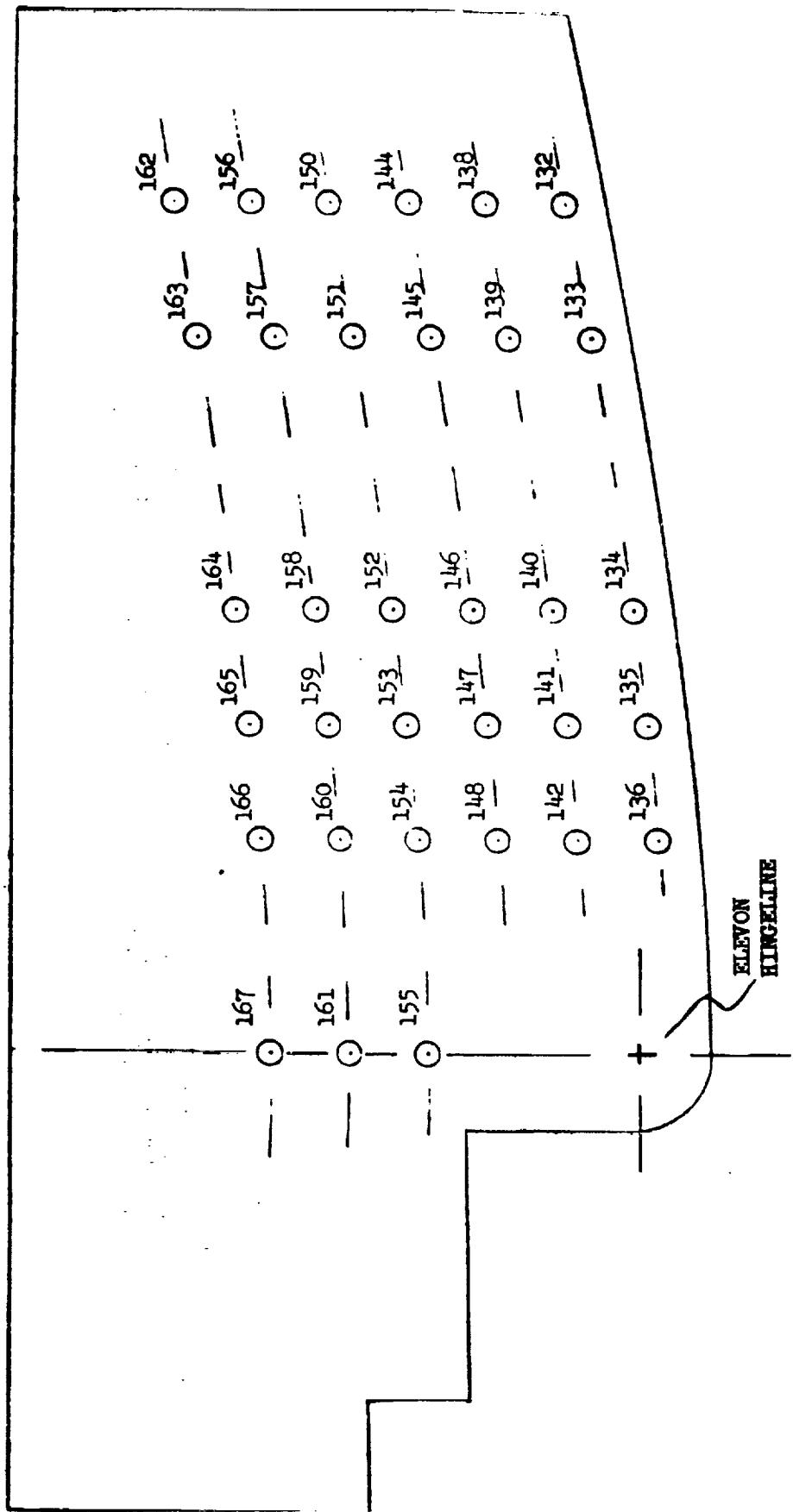
BOTTOM VIEW



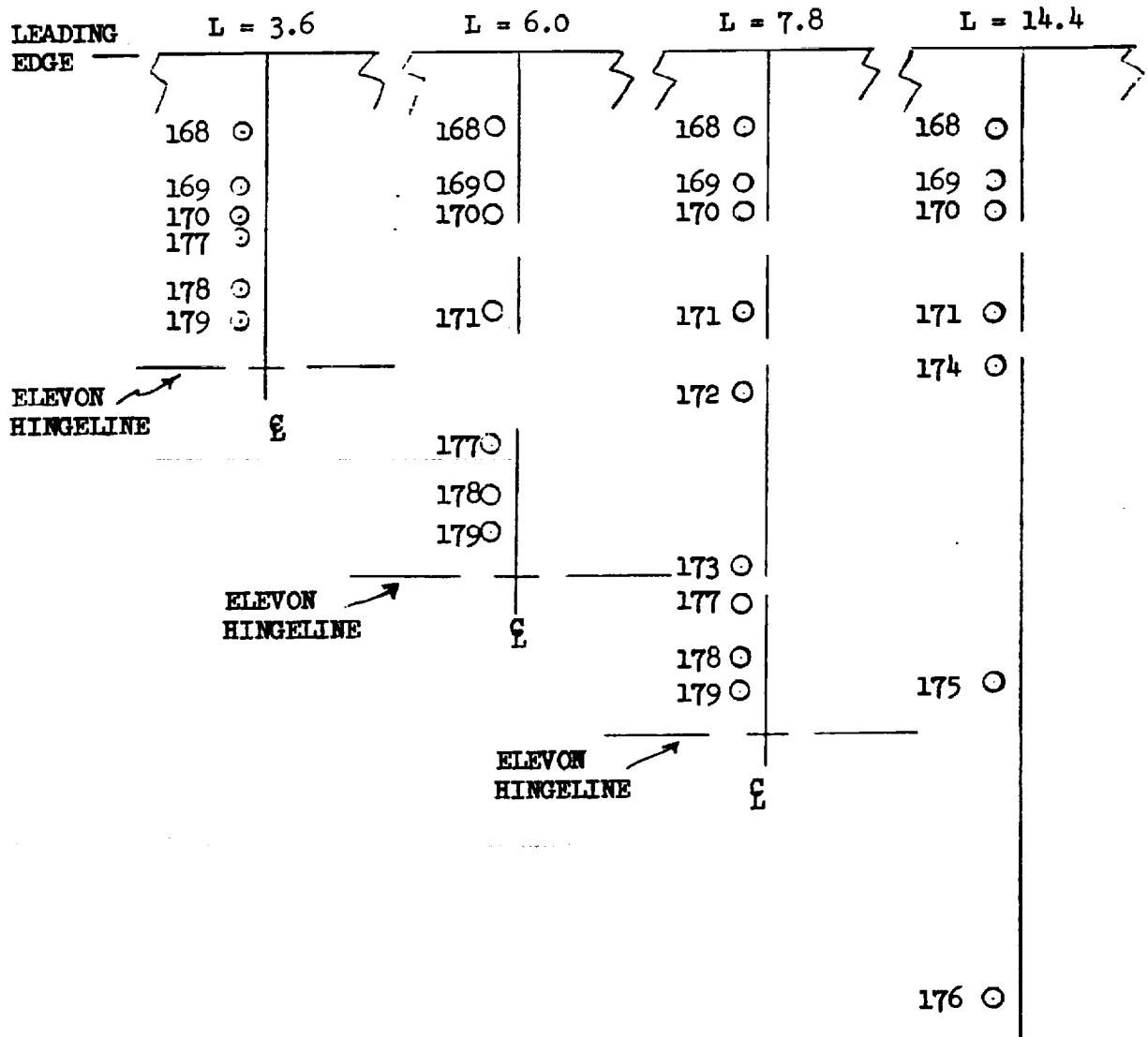
d. Flat Plate Lower Surface Thermocouples
Figure 2. Continued.



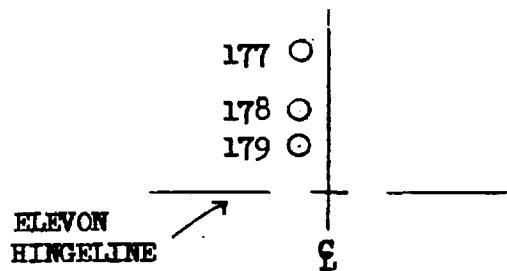
e. Elevon Pressures
Figure 2. Continued.



f. Fuselage Simulation Pressures
Figure 2. Continued.

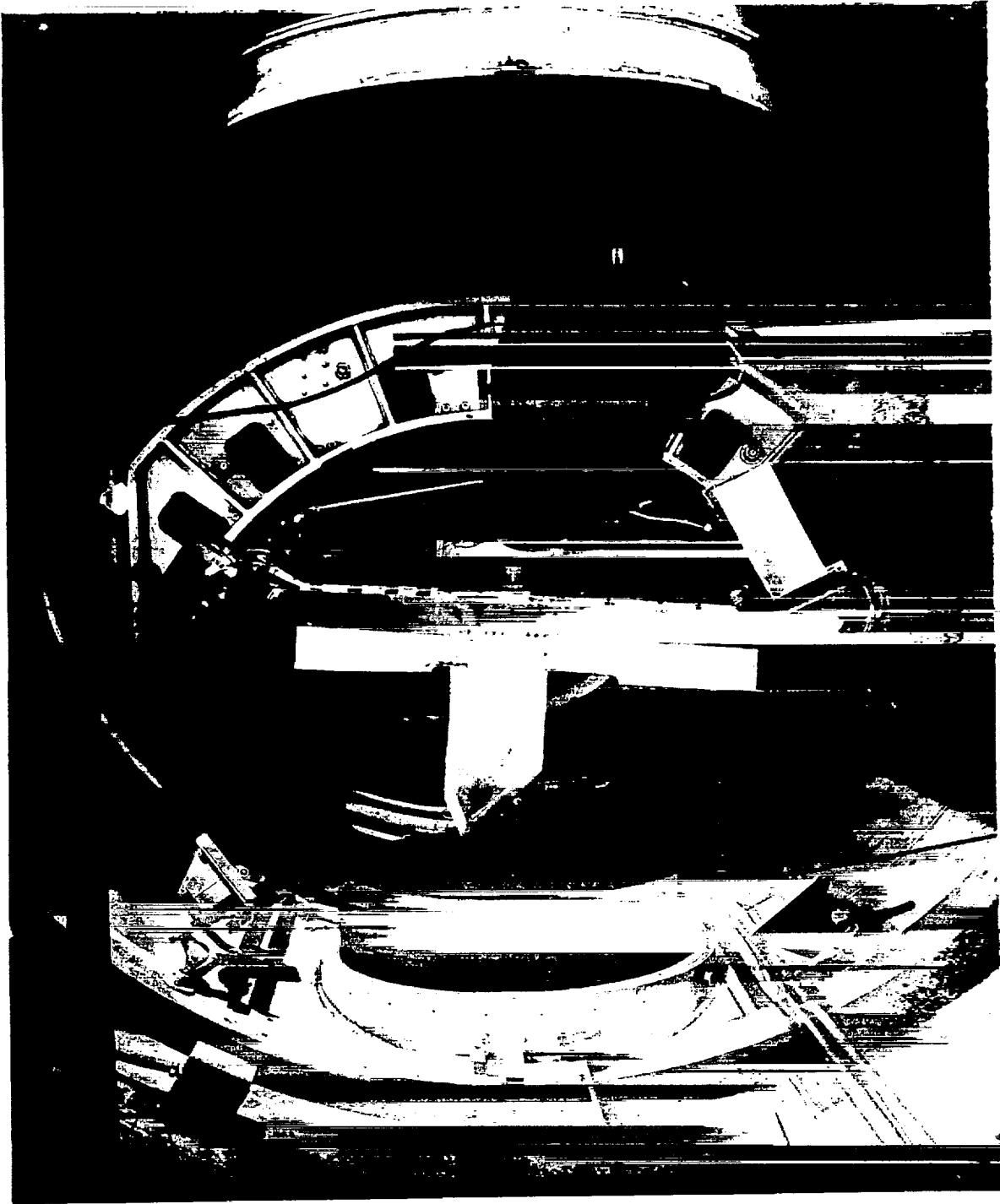


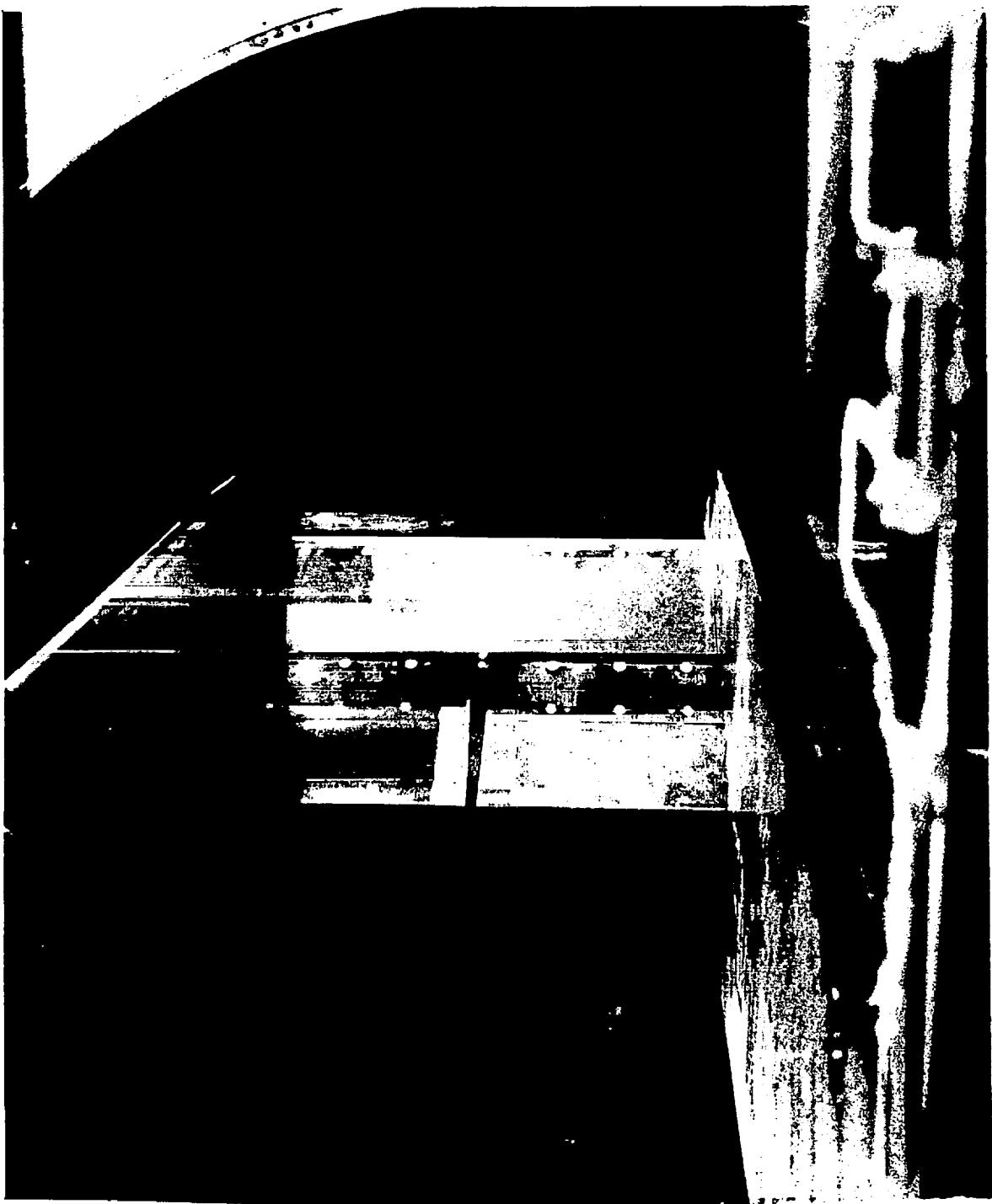
BOTTOM VIEW



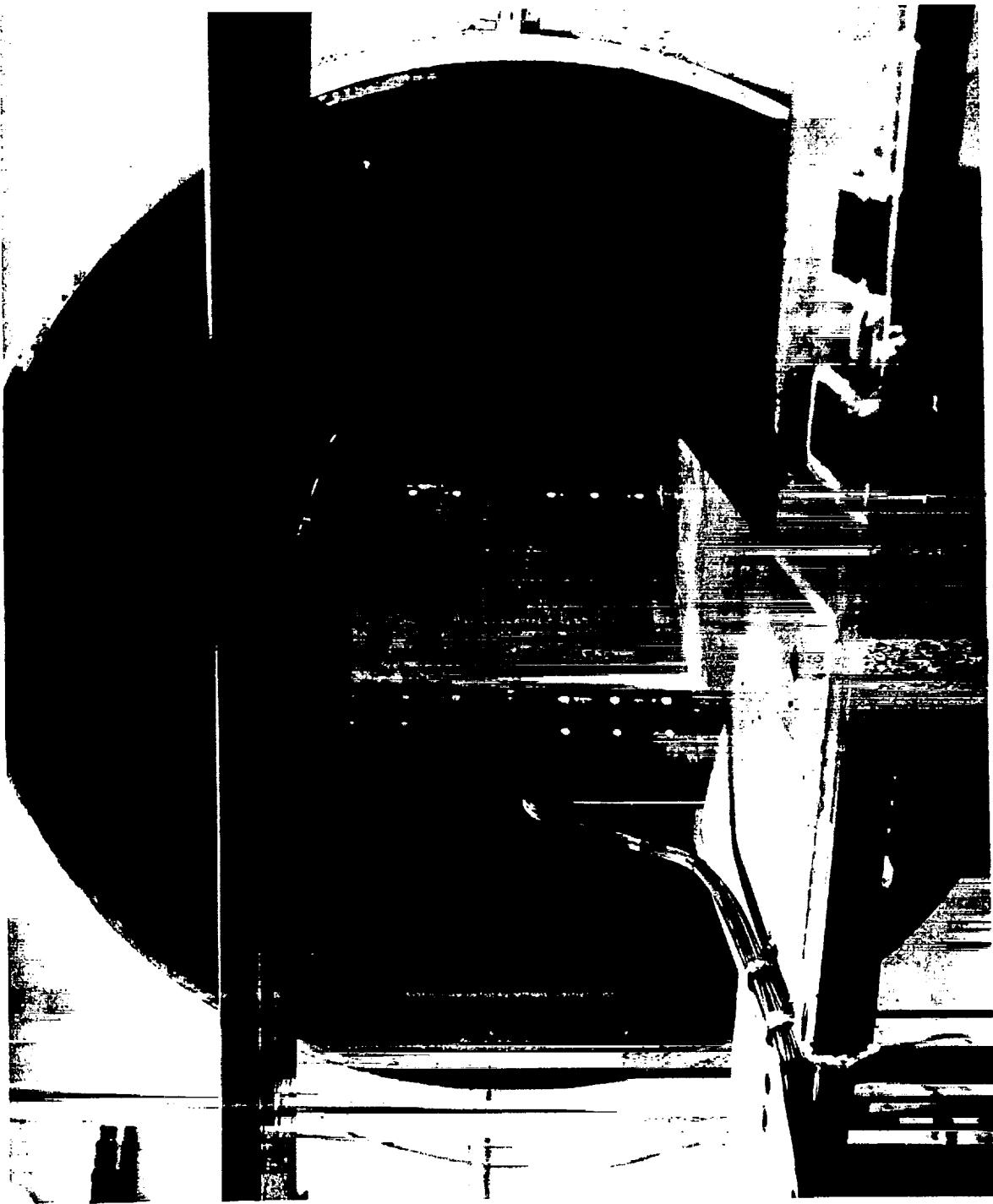
g. Flat Plate Lower Surface Pressures
 Figure 2. Concluded.

a. Side-View of Model Installed in Test Section
Figure 3. Model photographs.





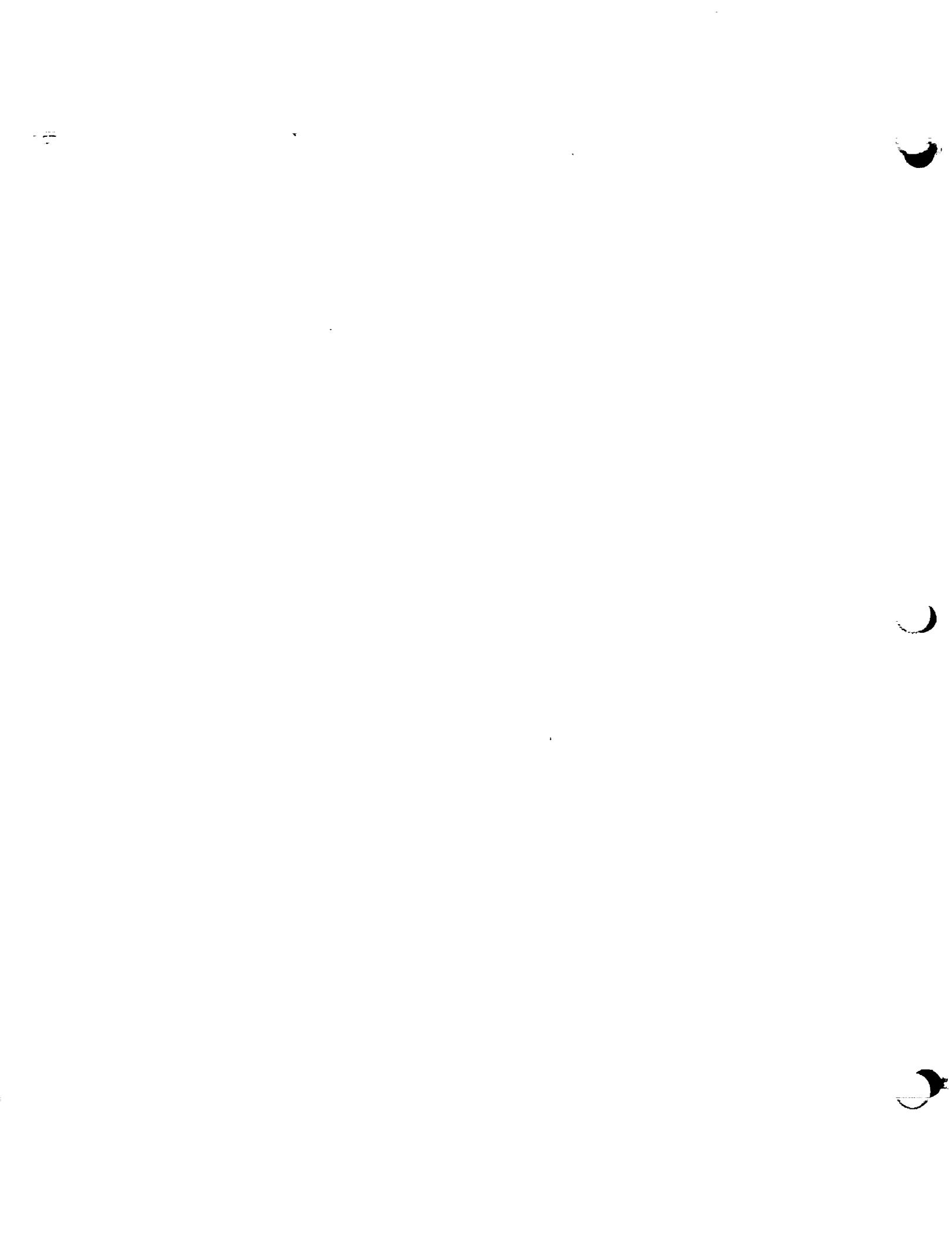
b. View Looking Forward of Elevon/Elevon Gap Configuration (EE)
Figure 3. Continued.



c. View Looking Forward of Elevon/Fuselage Interface Configuration (EF)
Figure 3. Concluded.

APPENDIX

TABULATED SOURCE DATA



DATE 28 MAR 79

AMES 0H58 HEATING AND PRESSURE DATA

0H58 ELEVON/ELEVON-HEATING

ELEVON

	ALPHA DEG.	BETA DEG.	MACH	RN/FT F/T	PT PSIA	TT DEG. R	HT BTU LBH	BETA RN/L	PARAMETRIC DATA
	30.00	.0000	7.300	.5360+06	189.8	1901.	477.1	.0000 .5000	MACH = 7.300
									LENGTH = 7.800

TEST CONDITIONS

RUN NUMBER	PHI DEG.	HS SPHERE TH=540	ELEVON
1	.0000	.7593-01	

TEST DATA

RUN NUMBER	DIM DUMMY	T/C NO	H/HREF R=1.0	H/HREF R=0.9	QREF BTU FT ² SEC	QDTU BTU FT ² SEC	HW/HT	HW/HT	TW DEG. R	STN NO R=0.9
1	1.0000	1.0000	.13110	.1522	.1655	.26.16	3.430	.2776	.552.0	.4735-02
	2.0000	2.0000	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
	3.0000	3.0000	.49976-01	.5799-01	.6304-01	.26.21	1.310	.2764	.549.6	.1805-02
	4.0000	4.0000	.10560	.1225	.1332	.26.20	2.767	.2765	.549.9	.3814-02
	5.0000	5.0000	.62910-01	.7300-01	.7937-01	.26.20	1.648	.2766	.550.0	.2272-02
	6.0000	6.0000	.25209-01	.2925-01	.3180-01	.26.20	.6604	.2766	.549.9	.9104-03
	7.0000	7.0000	.94192-01	.1093	.1188	.26.19	2.467	.2767	.550.3	.3402-02
	8.0000	8.0000	.40309-01	.4677-01	.5085-01	.26.20	1.056	.2765	.549.7	.1456-02
	9.0000	9.0000	.12723-01	.1476-01	.1605-01	.26.22	.3336	.2760	.548.9	.4594-03
	10.0000	10.0000	.74825-01	.8682-01	.9439-01	.26.21	1.961	.2763	.549.4	.2702-02
	11.0000	11.0000	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
	12.0000	12.0000	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
	14.0000	14.0000	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
	15.0000	15.0000	.97211-01	.1128	.1227	.26.19	2.546	.2768	.550.5	.3511-02
	16.0000	16.0000	.92840-01	.1077	.1171	.26.20	2.433	.2764	.549.7	.3353-02
	17.0000	17.0000	.10064	.1168	.1270	.26.21	2.638	.2762	.549.2	.3634-02
	18.0000	18.0000	.91167-01	.1058	.1150	.26.21	2.390	.2763	.549.5	.3293-02
	19.0000	19.0000	.93869-01	.1089	.1164	.26.23	2.462	.2758	.548.4	.3389-02
	21.0000	21.0000	.58502-01	.6785-01	.7381-01	.26.20	1.532	.2767	.550.1	.2113-02
	22.0000	22.0000	.63674-01	.7620-01	.8285-01	.26.21	1.721	.2763	.549.5	.2372-02
	23.0000	23.0000	.78884-01	.9153-01	.9951-01	.26.21	2.067	.2763	.549.5	.2649-02

DATE 28 MAR 79

AMES OH58 HEATING AND PRESSURE DATA

UNIVERSITY OF TORONTO LIBRARIES

E1 E1

RUN NUMBER	DIM DUMMY	T/C NO	SIGHT ELEVATION FOR STATIONING				ELEVATION	HT/HT	TW DEG. R	STN NO R=0.9
			H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	GREF BTU/ FT2SEC				
1	1.0000	24.000	.92158-01	.1069	.1162	.26.22	2.416	.2760	548.9	.3328-02
	.0000	25.000	.79108-01	.9178-01	.9977-01	.26.24	2.075	.2756	548.0	.2856-02
	.0000	27.000	.42647-02	.4949-02	.5380-02	.26.21	.1118	.2763	549.5	.1540-03
	.0000	28.000	.27895-02	.3236-02	.3518-02	.26.22	.7315-01	.2759	548.6	.1007-03
	.0000	29.000	.17888-02	.2075-02	.2256-02	.26.21	.4634-01	.2755	547.9	.6459-04
	.0000	30.000	.18721-02	.2351-02	.26.24	.4912-01	.2756	.2756	547.9	.6759-04
	.0000	31.000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.0000
	.0000	32.000	.24697-03	.2864-03	.3113-03	.26.26	.6484-02	.2749	546.6	.8913-05

R2XA01

OH-58 ELEVON/ELEVON-HEATING ELEVON
 ALPHA = 30.00 BETA
 ELEVON = 5.000 RNL/L

```

ALPHA = 30.00          BETA    = .00000
ELEVON = 5.000           ROLL   = .50000
                           MACH   = 7.300
                           LENGTH = 7.800

```

PARAMETRIC DATA

TEST CONDITIONS

<i>PIN/FT</i>	<i>PT</i>	<i>TT</i>	<i>HT</i>	<i>PINF</i>	<i>TINF</i>	<i>RHO</i>	<i>VINF</i>	<i>SCALE</i>
<i>/FT</i>	<i>PSIA</i>	<i>DEG.</i>	<i>BTU/LBM</i>	<i>PSIA</i>	<i>DEG.</i>	<i>SLUGS/FT³</i>	<i>FT/SEC</i>	
.4781+06	193.4	2047.	517.4	.3311-01	185.0	.1502-04	4866.	.4000-01

RUN NUMBER	PHI DEG.	HS SPHERE	TW=540	-7663-01
6	.0000			

TEST DATA

הנִזְמָן - מִתְּבָרְגִּינְסְּטִיךְ

TEST CONDITIONS

RN/FT /FT	PT PSIA	TT DEG.	HT BTU/ LBH	PINF PSIA	TINF DEG. R	RHO SLUGS/ FT ³	VINF FT/SEC	SCALE
4781+06	193.4	2047.	517.4	.3311-01	185.0	1502-04	4866.	4000-0

RUN NUMBER	PHI DEG.	H5 SPHERE TH=540 7652-01
6	0000	

•••TEST DATA•••									
H/HREF R=0.9	H/HREF R=0.85	GREF BTU/ FT ² SEC	QDOT BTU/ FT ² SEC	W/H	TH DEG.	R	STN NO R=0.9		
.2045	.2215	.29 .69	5 .261	.2510	541 .3		.6661-02		
.1692	.1833	.29 .71	4 .358	.2505	540 .2		.5513-02		
.7810-01	.8461-01	.29 .74	2 .013	.2499	538 .9		.2545-02		
.1598	.1731	.29 .73	4 .118	.2501	539 .3		.5206-02		
.9894-01	.1072	.29 .73	2 .549	.2501	539 .3		.3223-02		
.3979-01	.4310-01	.29 .74	1 .025	.2502	539 .1		.1295-02		
.1482	.1606	.29 .73	3 .819	.2502	539 .5		.4830-02		
.6620-01	.6749-01	.29 .74	1 .606	.2499	538 .9		.2030-02		
.1811-01	.1962-01	.29 .75	.4670	.2496	539 .1		.5900-03		
.1127	.1221	.29 .74	2 .985	.2499	538 .9		.3672-02		
.0000	.0000	.0000	.0000	.0000	.0000		.0000		
.0000	.0000	.0000	.0000	.0000	.0000		.0000		
.2123-04	.2300-03	.29 .77	5 .480-02	.2491	537 .1		.6918-05		
.1493	.1618	.29 .71	3 .845	.2505	540 .4		.4865-02		
.1415	.1533	.29 .73	3 .646	.2502	539 .5		.4611-02		
.1500	.1625	.29 .73	3 .886	.2500	539 .2		.4888-02		
.1382	.1497	.29 .73	3 .560	.2502	539 .4		.4501-02		
.1387	.1502	.29 .75	3 .575	.2497	538 .4		.4518-02		
.8866-01	.9605-01	.29 .72	2 .283	.2505	540 .1		.2886-02		
.9801-01	.1062	.29 .73	2 .525	.2502	539 .5		.3193-02		
.0000	.0000	.0000	.0000	.0000	.0000		.0000		

PAGE 3
182X0021

AMES CH5B HEATING AND PRESSURE DATA

RUN NUMBER	DIM DUMMY	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	000T BTU/ FT2SEC	000T BTU/ FT2SEC	000T BTU/ FT2SEC	HW/HT	ELEVON	DEG. R	STN NO R=0.9
6	1.0000	24.000	.11656	.1345	.1457	.29.74	.3.467	.24.99	.538.9	.4382-02	.3673-02	
6	1.0000	25.000	.97712-01	.1127	.1221	.29.76	.2.909	.24.95	.538.0	.3673-02	.3673-02	
6	1.0000	27.000	.63699-02	.7350-02	.7962-02	.29.73	.1894	.2500	.539.1	.2395-03	.2395-03	
6	1.0000	28.000	.38105-02	.4396-02	.4763-02	.29.75	.1134	.2496	.538.3	.1432-03	.1432-03	
6	1.0000	29.000	.00000	.00000	.00000	.0000	.0000	.0000	.00000	.0000	.0000	
6	1.0000	30.000	.20160-02	.2326-02	.2519-02	.29.76	.5999-01	.2495	.537.9	.7578-04	.7578-04	
6	1.0000	31.000	.14024-02	.1618-02	.1753-02	.29.77	.4.75-01	.2492	.537.3	.5271-04	.5271-04	
6	1.0000	32.000	.00000	.00000	.00000	.0000	.0000	.0000	.00000	.0000	.0000	

PAGE 4
(R2XA02)

DATE 28 MAR 79

AMES OH58 HEATING AND PRESSURE DATA

OH58 ELEVON/ELEVON-HEATING

ELEVON

ALPHA = 30.00
ELEVON = -10.00
ELEVON = 30.00
ELEVON = -10.00

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	RN/FT /FT	PT PSIA	TT DEG. R	HT BTU/LBM	PINF PSIA	TINF DEG. R	RHO SLUGS/FT ³	VINF FT/SEC	SCALE
11	30.00	.0000	7.300	.5490+06	203.0	1947.	469.8	.3510-01	175.1	.1682-04	.4734.	.4000-01
RUN NUMBER	PHI DEG.	HS SPHERE TW=540 .7852-01										

TEST CONDITIONS

RN/FT /FT
PHI/HREF
R=1.0
H/HREF
R=0.9
H/HREF
R=0.85
H/HREF
R=0.8

PT PSIA
DEG. R
BTU/LBM

PINF PSIA
DEG. R
SLUGS/FT³

TINF DEG. R
VINF FT/SEC

TEST DATA

RUN NUMBER	DIM DUMMY	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/FT ² SEC	QDOT BTU/FT ² SEC	HM/HIT	TW DEG. R	STN NO R=0.9
1.0000	1.0000	5.32230-01	.6168-01	.6700-01	.28.06	1.493	.2701	551.3	.1689-02	
2.0000	2.0000	.522657-01	.6102-01	.6628-01	.28.07	1.479	.2696	550.4	.1669-02	
3.0000	3.0000	.26015-01	.3014-01	.3273-01	.29.10	.7310	.2691	549.2	.9631-03	
4.0000	4.0000	.51598-01	.5976-01	.6491-01	.28.10	1.449	.2691	549.3	.1631-02	
5.0000	5.0000	.31017-01	.3593-01	.3903-01	.28.10	.8715	.2691	549.3	.1601-02	
6.0000	6.0000	.13925-01	.1613-01	.1752-01	.28.10	.3913	.2690	549.1	.4941-03	
7.0000	7.0000	.44296-01	.5132-01	.5573-01	.28.10	1.245	.2691	549.3	.1572-02	
8.0000	8.0000	.21881-01	.2535-01	.2753-01	.28.10	.6149	.2689	548.9	.7765-03	
9.0000	9.0000	.72435-02	.8391-02	.9113-02	.28.11	.2036	.2688	548.7	.2570-03	
10.0000	10.0000	.39633-01	.4591-01	.4986-01	.28.11	1.114	.2688	548.7	.1406-02	
11.0000	11.0000	.00000	.00000	.00000	.0000	.0000	.0000	.0000	.0000	
12.0000	12.0000	.00000	.00000	.00000	.0000	.0000	.0000	.0000	.0000	
13.0000	13.0000	.00000	.00000	.00000	.0000	.0000	.0000	.0000	.0000	
14.0000	14.0000	.00000	.00000	.00000	.0000	.0000	.0000	.0000	.0000	
15.0000	15.0000	.45023-01	.5217-01	.5666-01	.28.06	1.263	.2699	551.0	.1598-02	
16.0000	16.0000	.45215-01	.5229-01	.5690-01	.28.08	1.270	.2695	550.2	.1605-02	
17.0000	17.0000	.541953-01	.6367-01	.6915-01	.28.09	1.544	.2692	549.6	.1650-02	
18.0000	18.0000	.50972-01	.5905-01	.6414-01	.28.09	1.432	.2693	549.7	.1609-02	
19.0000	19.0000	.52830-01	.6120-01	.6617-01	.28.11	1.485	.2688	548.7	.1675-02	
20.0000	20.0000	.30447-01	.3526-01	.3832-01	.28.06	.8545	.2699	550.9	.1081-02	
21.0000	21.0000	.35385-01	.4000-01	.4453-01	.28.08	.9936	.2695	550.2	.1656-02	
22.0000	22.0000	.43507-01	.5040-01	.5474-01	.28.10	1.222	.2691	549.2	.1644-02	
23.0000	23.0000									

DATE 28 MAR 79

AMES OH58 HEATING AND PRESSURE DATA

OH58 ELEVON/ELEVON-HEATING

RUN NUMBER	DIM DUMMY	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/FT12SEC	QDOT BTU/FT12SEC	H/HIT	TW DEG. R	STN NO R=0.9
11	1.0000	24.000	.50341-01	.5832-01	.6334-01	28.10	1.415	.2690	549.1	.1786-02
11	1.0000	25.000	.46724-01	.5412-01	.5878-01	28.11	1.314	.2687	548.4	.1638-02
11	1.0000	27.000	.26843-02	.3342-02	.3630-02	28.08	.8099-01	.2696	550.2	.1024-03
11	1.0000	28.000	.26431-02	.3062-02	.3326-02	28.10	.7426-01	.2691	549.3	.9379-04
11	1.0000	29.000	.00000	.00000	.00000	.0000	.00000	.00000	00000	.0000
11	1.0000	30.000	.20088-02	.2327-02	.2527-02	28.11	.5648-01	.2687	548.4	.7128-04
11	1.0000	31.000	.00000	.00000	.00000	.0000	.00000	.00000	.00000	.0000
11	1.0000	32.000	.00000	.00000	.00000	.0000	.00000	.00000	.00000	.0000

PAGE 6
(R2XA03)

DATE 28 MAR 79

AMES OH58 HEATING AND PRESSURE DATA

OH59 ELEVON/ELEVON-HEAT IN

SEVEN

11

ALPHA = 30.00 BETA = .0000 MACH = 7.300 LENGTH = 7.800
 ELEVON = .0000 ROLL = .7500

JUNI 1531. 100.

BETA DEG.	HS
ALPHA DEG.	SPHERE
RUN NUMBER	TH-540
2	30.00
RUN NUMBER	0000
2	0000

PT PSIA	TT DEG. R	HT BTU/ LBM	PINF PSIA	TINF DEG. R	RHO SLUGS/ FT ³	VINF FT/SEC	SCALE
22.6	1908.	479.1	.5079-01	171.3	.2488-04	4683.	.4000-01

RUN NUMBER	2
PHI DEG.	0000
HS SPHERE TW=540	0427-01

PAGE 7
R2XAO4

PAGE 7

REX AND

DATE 28 MAR 79

AMES OR-5B HEATING AND PRESSURE DATA

PAGE 8
(R2XA04)

RUN NUMBER	DIM DUMMY	T/C NO	0-5B ELEVON/ELEVON-HEATING				ELEVON	H/W/HT	TH	DEG. R	STN NO R=0.9
			H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/FT2SEC					
2	1.0000	24.000	.89465-.01	.76245-.01	.1038 .8841-.01	.1128 .9608-.01	32.74	.2748	548.8	.2609-.02	
2	1.0000	25.000	.4340-.02	.5462-.02	.5940-.02	.5940-.02	32.81	.2733	545.8	.2223-.02	
2	1.0000	27.000	.33639-.02	.3904-.02	.4245-.02	.4245-.02	32.53	.1530	.2793	.557.8	.1372-.03
2	1.0000	28.000	.19822-.02	.2299-.02	.2499-.02	.2499-.02	32.62	.1097	.2773	.553.8	.9812-.04
2	1.0000	29.000	.24605-.02	.2854-.02	.3101-.02	.3101-.02	32.73	.6488-.01	.2751	549.2	.5780-.04
2	1.0000	30.000	.00000	.00000	.00000	.00000	32.78	.8067-.01	.2740	547.0	.7174-.04
2	1.0000	31.000	.00000	.00000	.00000	.00000	.0000	.0000	.0000	.0000	.0000
2	1.0000	32.000	.00000	.00000	.00000	.00000	.0000	.0000	.0000	.0000	.0000

DATE 28 MAR 79

AMES OHS8 HEATING AND PRESSURE DATA

OHS8 ELEVON/ELEVON-HEATING

ELEVON

	ALPHA DEG.	BETA DEG.	MACH	RN/FT /FT	PT PSIA	T _T DEG. R	HT BTU/ LBH	PIN _F PSIA	TIN _F DEG. R	RHO SLUGS/ FT ³	VINF FT/SEC	SCALE
	30.00	.0000	7.300	.7756406	296.6	1984.	499.9	.5110-01	178.7	.2399-04	4783.	.4000-01

PARAMETRIC DATA

	ALPHA = 30.00	BETA = 5.000	RN/L	MACH = 7.300	LENGTH = 7.800

•••TEST CONDITIONS•••

	ALPHA ELEVON	BETA RN/L	MACH	RN/FT /FT	PT PSIA	T _T DEG. R	HT BTU/ LBH	PIN _F PSIA	TIN _F DEG. R	RHO SLUGS/ FT ³	VINF FT/SEC	SCALE
	30.00	.0000	7.300	.7756406	296.6	1984.	499.9	.5110-01	178.7	.2399-04	4783.	.4000-01

•••TEST DATA•••

RUN NUMBER	DIM DUMMY	T/C NO	H/HREF R=1.0	H/HREF R=0.9	QREF R=0.95	QREF R=0.85	000T BTU/SEC	000T BTU/SEC	HM/HT	TM DEG. R	STN NO R=0.9
9	1.000	1.0000	.18923	.2191	.2378	.34.80	6.585	.2661	554.5	.5628-02	
9	1.000	2.0000	.15210	.1761	.1911	.34.83	5.298	.2654	553.1	.4523-02	
9	1.000	3.0000	.67489-01	.7811-01	.8478-01	.34.87	2.354	.2646	551.4	.2007-02	
9	1.000	4.0000	.14238	.1648	.1789	.34.85	4.962	.2651	552.4	.4234-02	
9	1.000	5.0000	.89948-01	.1041	.1130	.34.85	3.135	.2651	551.7	.2675-02	
9	1.000	6.0000	.35176-01	.4071-01	.4419-01	.34.87	1.226	.2648	551.7	.1046-02	
9	1.000	7.0000	.1579	.1714	.1714	.34.83	4.752	.2655	553.1	.4057-02	
9	1.000	8.0000	.56268-01	.6513-01	.7069-01	.34.86	1.962	.2649	551.8	.1673-02	
9	1.000	9.0000	.15615-01	.1807-01	.1961-01	.34.89	.5448	.2643	550.6	.4643-03	
9	1.000	10.0000	.10248	.1186	.1288	.34.86	3.572	.2650	552.1	.3047-02	
9	1.000	11.0000	.00000	.00000	.00000	.00000	.00000	.00000			
9	1.000	12.0000	.71264-03	.8246-03	.8950-03	.34.92	.2489-01	.2637	549.4	.2119-04	
9	1.000	14.0000	.54666-03	.6326-03	.6865-03	.34.93	.1909-01	.2636	549.2	.1625-04	
9	1.000	15.0000	.13254	.1534	.1665	.34.85	4.620	.2650	552.2	.334-02	
9	1.000	16.0000	.12249	.1418	.1539	.34.89	4.273	.2645	551.1	.3542-02	
9	1.000	17.0000	.12909	.1494	.1622	.34.88	4.502	.2646	551.2	.3839-02	
9	1.000	18.0000	.12138	.1405	.1525	.34.86	4.231	.2649	551.9	.3609-02	
9	1.000	19.0000	.12006	.1389	.1508	.34.89	4.189	.2643	550.6	.3570-02	
9	1.000	21.0000	.78308-01	.9063-01	.9838-01	.34.87	2.731	.2647	551.5	.2329-02	
9	1.000	22.0000	.84382-01	.9766-01	.1060	.34.88	2.944	.2644	551.0	.2509-02	
9	1.000	23.0000	.10012	.1159	.1258	.34.93	3.493	.2643	550.7	.2977-02	

DATE 28 MAR 79

AMES OH58 HEATING AND PRESSURE DATA

ANED EL EVENT/EL EVENT-MAPPING

-58 ELEVON/ELEVON-THEATING

PAGE 10
(R2XA05)

DATE 28 MAR 79

AMES OH5B HEATING AND PRESSURE DATA

0H5B ELEVON/ELEVON-HEATING

ELEVON

		ALPHA = 30.00	BETA = -10.00	R/V/L = .7500	MACH = 7.300	LENGTH = 7.800
	ELEVON					

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	RN/FT /FT	PT PSIA	TT DEG. R	HT LB/M	PINF PSIA	TINF DEG. R	RHO FT ³	VINF FT/SEC	SCALE
12	30.00	.0000	7.300	.7599+06	287.9	1974.	497.1	.4965-01	177.7	.2344-04	4770.	.4000-01
RUN NUMBER	PHI DEG.		HS SPHERE TH=540									
12	.0000		.9351-01									

TEST DATA

RUN NUMBER	DIM DUMMY	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	ODOT BTU/FT ² SEC	ODOT BTU/FT ² SEC	ODOT BTU/FT ² SEC	HW/HWT	HW/HWT	HW/HWT	STN NO R=0.9
12	1.0000	1.0000	.48688-01	.5638-01	.6121-01	34.06	1.659	.2668	552.7	1464-02		
12	1.0000	2.0000	.50402-01	.5835-01	.6335-01	34.10	1.719	.2660	551.0	.1516-02		
12	1.0000	3.0000	.55046-01	.2899-01	.3147-01	34.16	.8555	.2649	548.9	.7532-03		
12	1.0000	4.0000	.51585-01	.5971-01	.6482-01	34.14	1.761	.2652	549.5	.1551-02		
12	1.0000	5.0000	.31597-01	.36557-01	.3970-01	34.14	1.079	.2653	549.6	.9502-03		
12	1.0000	6.0000	.1648-01	.1648-01	.1789-01	34.15	.4864	.2649	548.9	.4283-03		
12	1.0000	7.0000	.43728-01	.5062-01	.5495-01	34.13	1.492	.2654	549.9	.1315-02		
12	1.0000	8.0000	.62680-01	.2625-01	.2849-01	34.16	.7748	.2648	548.7	.6820-03		
12	1.0000	9.0000	.73073-02	.8457-02	.9178-02	34.19	.2498	.2642	547.4	.2197-03		
12	1.0000	10.0000	.40010-01	.4631-01	.5027-01	34.16	1.367	.2648	548.6	.1203-02		
12	1.0000	11.0000	.00000	.00000	.00000		.00000	.00000	.0000	.0000		
12	1.0000	12.0000	.43861-03	.5075-03	.5507-03	34.26	.1503-01	.2629	544.6	.3119-04		
12	1.0000	14.0000	.21933-03	.2538-03	.2754-03	34.25	.7512-02	.2630	544.8	.6594-05		
12	1.0000	15.0000	.44865-01	.5194-01	.5638-01	34.11	1.531	.2658	550.6	.1349-02		
12	1.0000	16.0000	.45541-01	.5271-01	.5722-01	34.15	1.555	.2651	549.3	.1370-02		
12	1.0000	17.0000	.56317-01	.6402-01	.6949-01	34.17	1.890	.2646	548.2	.663-02		
12	1.0000	18.0000	.52365-01	.6061-01	.6579-01	34.17	.789	.2647	548.5	.1575-02		
12	1.0000	19.0000	.53822-01	.6228-01	.6760-01	34.20	1.841	.2639	546.8	.1618-02		
12	1.0000	21.0000	.30677-01	.3551-01	.3855-01	34.13	1.047	.2655	550.1	.9226-03		
12	1.0000	22.0000	.35834-01	.4149-01	.4502-01	34.15	.224	.2650	548.9	.1078-02		
12	1.0000	23.0000	.45024-01	.5211-01	.5655-01	34.19	.539	.2643	547.5	.1354-02		

DATE 28 MAR 79

AMES OH58 HEATING AND PRESSURE DATA

PAGE 12

0H58 ELEVON/ELEVON+HEATING

RUN NUMBER	DIM DUMMY	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/FT2SEC	QDOT BTU/FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
12	1.0000	24.000	.51398-01	.5948-01	.6456-01	34.19	1.757	.2643	547.5	.1545-02
12	1.0000	25.000	.46821-01	.5418-01	.5880-01	34.22	1.602	.2636	546.1	.1408-02
12	1.0000	27.000	.32179-02	.3725-02	.4043-02	34.16	.1099	.2649	548.8	.9677-04
12	1.0000	28.000	.28978-02	.3354-02	.3640-02	34.19	.9909-01	.2641	547.2	.8713-04
12	1.0000	29.000	.17368-02	.2010-02	.2181-02	34.23	.5945-01	.2634	545.7	.5222-04
12	1.0000	30.000	.22620-02	.2617-02	.2840-02	34.23	.7742-01	.2635	545.9	.6801-04
12	1.0000	31.000	.83221-03	.9629-03	.1045-02	34.25	.2850-01	.2630	545.0	.2502-04
12	1.0000	32.000	.00000	.00000	.00000	.0000	.0000	.0000	.0000	.0000

(R2XA06)

DATE 28 MAR 79

AMES OH58 HEATING AND PRESSURE DATA

OH58 ELEVON/ELEVON-HEATING

ELEVON

PAGE 13
(R2XA071)

ALPHA = 30.00 BETA = 0.0000 RN/L = 1.0000 LENGTH = 7.800

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	RN/FT /FT	PT PSIA	TT DEG. R	HT BTU LBM	PINF PSIA	TINF DEG. R	RHO SLUGS/ FT ³	VINF FT/SEC	SCALE
4	30.00	.0000	7.300	.9554+06	388.2	2052.	518.8	.6643-01	185.5	.3006-04	4873.	.4000-01
RUN NUMBER	PHI DEG.	HS SPHERE TH=54.0										
4	.0000	.1086										

TEST DATA

RUN NUMBER	DIM DUMMY	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/FT ² SEC	Q00T BTU/FT ² SEC	HW/HT	TH DEG. R	STN NO R=0.9
4	1.0000	1.3507	1.562	1.695	41.56	5.613	.2613	564.9	3595-02	
4	1.0000	2.0000	1.1344	1.311	1.422	41.75	4.737	.2580	557.8	.3018-02
4	1.0000	3.0000	4.8338-01	5.586-01	6.056-01	41.81	2.021	.2570	555.6	.1286-02
4	1.0000	4.0000	1.0536	1.218	1.320	41.78	4.402	.2576	557.0	.2803-02
4	1.0000	5.0000	651.35-01	7527-01	8163-01	41.78	2.721	.2575	556.8	.1733-02
4	1.0000	6.0000	.26227-01	.3031-01	.3286-01	41.81	1.097	.2571	555.8	.6977-03
4	1.0000	7.0000	1.0013	1.157	1.255	41.76	4.181	.2579	557.6	.2664-02
4	1.0000	8.0000	4.3818-01	5.063-01	5.490-01	41.80	1.832	.2572	556.0	.1166-02
4	1.0000	9.0000	1.3020-01	1.504-01	1.631-01	41.85	.5449	.2564	554.4	.3463-03
4	1.0000	10.000	.86160-01	.9557-01	.1080	41.80	3.601	.2573	556.2	.2292-02
4	1.0000	11.000	1.3651-02	1.5777-02	1.709-02	41.93	.5724-01	.2551	551.6	.3631-04
4	1.0000	12.000	.86155-03	.9953-03	.1079-02	41.90	.3610-01	.2556	552.7	.2291-04
4	1.0000	14.000	.00000	.00000	.00000	.00000	.00000	.00000	.0000	
4	1.0000	15.000	.99558-01	.1152	.1249	41.78	4.164	.2575	556.8	.2651-02
4	1.0000	16.000	.92459-01	.1068	.1158	41.81	3.866	.2571	555.8	.2460-02
4	1.0000	17.000	.98774-01	.1141	.1238	41.82	4.130	.2570	556.6	.2627-02
4	1.0000	18.000	.92679-01	.1071	.1161	41.80	3.874	.2573	556.3	.2465-02
4	1.0000	19.000	.93532-01	.1081	.1172	41.84	3.913	.2566	554.7	.2488-02
4	1.0000	21.000	.58545-01	.6765-01	.7336-01	41.81	2.448	.2571	555.9	.1557-02
4	1.0000	22.000	.63624-01	.7352-01	.7971-01	41.82	2.661	.2568	555.3	.1692-02
4	1.0000	23.000	.7264-01	.8928-01	.9680-01	41.82	3.231	.2569	555.3	.2055-02

DATE 28 MAR 79

AMES OH5B HEATING AND PRESSURE DATA

OH5B ELEVON/ELEVON-HEATING

RUN NUMBER	DIM NUMBER	T/C NO	H/HREF R=1.0	H/HREF R=0.9	HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HM/HT	TW	STN NO R=0.9
# 1.0000	24.000	.90209-01	.1042	.1130	.41.83	3.774	.2567	555.0	.2400-02	
# 1.0000	25.000	.74681-01	.8628-01	.9355-01	.41.86	3.126	.2562	553.9	.1986-02	
# 1.0000	27.000	.55574-02	.6421-02	.6962-02	.41.85	.2326	.2564	554.3	.1478-03	
# 1.0000	28.000	.38370-02	.4433-02	.4806-02	.41.89	.1607	.2558	553.1	.1021-03	
# 1.0000	29.000	.20970-02	.2422-02	.2626-02	.41.91	.8788-01	.2555	552.3	.5577-04	
# 1.0000	30.000	.22924-02	.2648-02	.2871-02	.41.89	.9604-01	.2557	552.7	.6097-04	
# 1.0000	31.000	.15399-02	.1779-02	.1929-02	.41.90	.6453-01	.2555	552.4	.4096-04	
# 1.0000	32.000	.69385-03	.1032-02	.1119-02	.41.92	.3747-01	.2552	551.9	.2377-04	

PAGE 14
(R2XA071)

DATE 28 MAR 79

AMES OH58 HEATING AND PRESSURE DATA

OH58 ELEVON/ELEVON-HEATING

ELEVON

	ALPHA DEG.	BETA DEG.	MACH	RN/FT /FT	PT PSIA	TT DEG. R	HT BTU/ LB _m	BETA RNL	PINF PSIA	TINF DEG. R	RHO SLUGS/ FT ³	VINF FT/SEC	LENGTH = 7,800
10	30.00	.0000	7.300	.9634+06	394.9	2062.	521.5		.6751-01	186.4	.3038-04	4886.	.4000-01

PARAMETRIC DATA

PAGE 15
(REXXA08)

TEST CONDITIONS

RUN NUMBER	PHI DEG.	HS SPHERE TH=540 .1095	ELEVON	ALPHA = 30.00 ELEVON = 5,000	BETA RNL	PINF PSIA	TINF DEG. R	HT BTU/ LB _m	BETA RNL	PINF PSIA	TINF DEG. R	RHO SLUGS/ FT ³	VINF FT/SEC	SCALE
10	30.00	.0000	7.300	.9634+06	394.9	2062.	521.5							

TEST DATA

RUN NUMBER	DIM DUMMY	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	H/HREF R=0.8	GREF BTU/ FT2SEC	ODOT BTU/ FT2SEC	H/H R	H/H R	H/H R	H/H R	STN NO R=0.9
10	1.0000	1.0000	.21568	.2493	.2705	.4224	9.110	2595	563.9	5710-02			
10	1.0000	2.0000	.16800	.1942	.206	.4229	7.104	2587	562.2	.4447-02			
10	1.0000	3.0000	.71822	.01	.8300-01	.9000-01	42.36	3.042	2574	559.5	.1901-02		
10	1.0000	4.0000	.16124	.1864	.2021	.42232	6.824	.2561	560.9	.4268-02			
10	1.0000	5.0000	.99059	.01	.1145	.1241	42.32	4.191	.2580	560.8	.2621-02		
10	1.0000	6.0000	.37320	.01	.4313-01	.4677-01	42.36	1.581	.2575	559.7	.9878-03		
10	1.0000	7.0000	.15725	.1818	.1971	.4230	6.652	.2584	561.7	.4163-02			
10	1.0000	8.0000	.61519	.01	.7110-01	.7110-01	42.35	2.605	.2576	560.0	.1628-02		
10	1.0000	9.0000	.16379	.01	.1893-01	.2052-01	42.40	.6945	.2567	558.0	.4335-03		
10	1.0000	10.0000	.11839	.01	.1368	.1484	42.35	5.013	.2577	560.1	.3134-02		
10	1.0000	11.0000	.57173	.03	.6694-03	.7159-03	42.50	.2430-01	.2552	554.6	.1513-02		
10	1.0000	12.0000	.1394	.02	.1611-02	.1746-02	42.46	.5919-01	.2558	556.0	.3689-04		
10	1.0000	14.0000	.97736	.03	.1129-02	.1224-02	42.47	.4151-01	.2557	555.7	.2586-04		
10	1.0000	15.0000	.14305	.01	.1653	.1793	42.33	6.055	.2579	560.6	.3786-02		
10	1.0000	16.0000	.12482	.02	.1496	.1622	42.37	5.484	.2573	559.2	.3426-02		
10	1.0000	17.0000	.13770	.01	.1591	.1725	42.37	5.835	.2572	559.0	.3645-02		
10	1.0000	18.0000	.12986	.01	.1501	.1627	42.35	5.500	.2576	559.8	.3437-02		
10	1.0000	19.0000	.12996	.02	.1502	.1628	42.41	5.511	.2567	567.9	.3440-02		
10	1.0000	21.0000	.8421	.01	.8735-01	.1055	42.36	3.367	.2575	559.6	.2229-02		
10	1.0000	22.0000	.89215	.01	.1031	.1118	42.38	3.781	.2571	558.7	.2361-02		
10	1.0000	23.0000	.10649	.01	.1230	.1334	42.41	4.517	.2566	557.7	.2818-02		

DATE 28 MAR 79

AMES OH58 HEATING AND PRESSURE DATA

PAGE 16
(REF A08)

RUN NUMBER	DIM NUMBER	T/C NO	OH58 ELEVON/ELEVON-HEATING			ELEVON	H/H/HT	TW DEG. R	STN NO R=0.9
			H/HREF R=1.0	H/HREF R=0.9	QREF BTU/ FT SEC				
10	1.00000	24.000	.12446	.1438	.1560	42.38	.2575	.2571	.3294-.02
10	1.00000	25.000	.10148	.1172	.1271	42.43	.4306	.2563	.2686-.02
10	1.00000	27.000	.11361-01	.1333-01	.1423-01	42.41	.4818	.2566	.3007-.03
10	1.00000	28.000	.63223-02	.7304-02	.7919-02	42.45	.2684	.2559	.1673-.03
10	1.00000	29.000	.29019-02	.3352-02	.3633-02	42.49	.1233	.2554	.7679-.04
10	1.00000	30.000	.28936-02	.3313-02	.3624-02	42.47	.1229	.2556	.7655-.04
10	1.00000	31.000	.17724-02	.2047-02	.2219-02	42.48	.7530-01	.2554	.4690-.04
10	1.00000	32.000	.47248-03	.5458-03	.5917-03	42.49	.2008-01	.2553	.1250-.04

DATE 28 MAR 79

AMES OH-58 HEATING AND PRESSURE DATA

OH58 ELEVON/ELEVON-HEATING ELEVON

PAGE 17
(R2XA09)

ELEVON

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	RN/FT	PT PSIA	TT DEG. R	HT BTU/LBM	BETA RN/L	PINF PSIA	TINF DEG. R	RHO FT ³	VINF FT/SEC	SCALE
13 30.00	.0000	.0000	7.300	.1046+07	384.4	1941.	488.1	.6651-01	174.5	.3199-04	4727.	.4000-01	

TEST CONDITIONS

RUN NUMBER	PHI DEG.	HS SPHERE TH540	1081
13 .0000	.0000	.0000	

PARAMETRIC DATA

ELEVON	ALPHA = 30.00	BETA = 0.000	MACH = 7.300	LENGTH = 7.800
ELEVON = -10.00		1.0000		

TEST DATA

RUN NUMBER	DIM	T/C NO	H/HREF R=1.0	H/HREF R=0.9	QREF R=0.85	QREF R=1.0	Q00T BTU/FT2SEC	Q00T BTU/FT2SEC	HW/HT	HW/HT	TW DEG. R	STN NO R=0.9
13 1.0000	1.0000	.46074-01	.5345-01	.5811-01	.5909-01	.6423-01	.38.17	1.759	.2757	.2757	560.9	.1186-02
13 1.0000	2.0000	.505940-01	.5921-01	.64174-01	.6421-01	.6423-01	.38.22	1.947	.2749	.2749	559.2	.1312-02
13 1.0000	3.0000	.25185-01	.2921-01	.3174-01	.3174-01	.3174-01	.38.29	.9643	.2736	.2736	556.6	.6484-03
13 1.0000	4.0000	.54621-01	.6335-01	.6885-01	.6885-01	.6885-01	.38.26	2.090	.2741	.2741	557.6	.1406-02
13 1.0000	5.0000	.32719-01	.3795-01	.4124-01	.4124-01	.4124-01	.38.26	1.252	.2741	.2741	557.5	.6424-03
13 1.0000	6.0000	.14466-01	.1678-01	.1823-01	.1823-01	.1823-01	.38.29	.5538	.2736	.2736	556.7	.3724-03
13 1.0000	7.0000	.46467-01	.5389-01	.5857-01	.5857-01	.5857-01	.38.25	1.777	.2742	.2742	557.9	.1196-02
13 1.0000	8.0000	.23969-01	.2779-01	.3020-01	.3020-01	.3020-01	.39.29	.9178	.2735	.2735	556.5	.6170-03
13 1.0000	9.0000	.69190-02	.8022-02	.8717-02	.8717-02	.8717-02	.38.33	.2652	.2728	.2728	554.9	.1781-03
13 1.0000	10.000	.43247-01	.5015-01	.5450-01	.5450-01	.5450-01	.38.30	1.656	.2734	.2734	556.2	.1113-02
13 1.0000	11.000	.17464-02	.2023-02	.2197-02	.2197-02	.2197-02	.38.60	.6742-01	.2680	.2680	545.2	.4493-04
13 1.0000	12.000	.40772-03	.4725-03	.5133-03	.5133-03	.5133-03	.39.44	.1567-01	.2708	.2708	551.0	.1049-04
13 1.0000	14.000	.74457-03	.9374-03	.9374-03	.9374-03	.9374-03	.39.44	.2862-01	.2709	.2709	551.0	.916-04
13 1.0000	15.000	.46118-01	.5349-01	.5814-01	.5814-01	.5814-01	.38.23	1.763	.2746	.2746	558.6	.1187-02
13 1.0000	16.000	.466521-01	.5395-01	.5863-01	.5863-01	.5863-01	.38.27	1.781	.2739	.2739	557.1	.1198-02
13 1.0000	17.000	.58066-01	.6733-01	.7317-01	.7317-01	.7317-01	.38.31	2.224	.2732	.2732	555.8	.1495-02
13 1.0000	18.000	.54549-01	.6325-01	.6874-01	.6874-01	.6874-01	.38.31	2.090	.2733	.2733	555.9	.1404-02
13 1.0000	19.000	.56805-01	.6586-01	.7155-01	.7155-01	.7155-01	.38.36	2.179	.2723	.2723	553.9	.1462-02
13 1.0000	21.000	.31522-01	.3656-01	.3973-01	.3973-01	.3973-01	.39.25	1.206	.2743	.2743	558.0	.8116-03
13 1.0000	22.000	.36847-01	.4273-01	.4644-01	.4644-01	.4644-01	.38.29	1.411	.2736	.2736	556.6	.9486-03
13 1.0000	23.000	.47147-01	.5466-01	.5940-01	.5940-01	.5940-01	.38.33	1.807	.2728	.2728	554.9	.1214-02

DATE 28 MAR 79

AMES OH58 HEATING AND PRESSURE DATA

PAGE 18

(R2XA09)

RUN NUMBER	DIM NUMBER	T/C NO	OH58 ELEVON/ELEVON-HEATING			ELEVON	H/H/HT	TW	STN NO R=0.9
			H/HREF R=1.0	H/HREF R=0.9	QREF BTU/ FT2SEC				
13	1.0000	24.000	.54183-01	.62982-01	.6826-01	38.34	2.077	.2727	.554.7
13	1.0000	25.000	.488856-01	.56663-01	.6153-01	38.38	1.875	.2719	.553.2
13	1.0000	27.000	.275560-02	.3195-02	.3473-02	38.29	.1055	.2736	.556.6
13	1.0000	28.000	.27637-02	.3204-02	.3482-02	38.34	.1060	.2727	.554.8
13	1.0000	29.000	.19645-02	.2277-02	.2471-02	38.39	.754-.01	.2718	.553.0
13	1.0000	30.000	.22671-02	.2628-02	.2856-02	38.39	.8704-.01	.2718	.552.9
13	1.0000	31.000	.00000	.00000	.00000	.0000	.0000	.0000	.0000
13	1.0000	32.000	.00000	.00000	.00000	.0000	.0000	.0000	.0000

DATE 28 MAR 79

AMES 0458 HEATING AND PRESSURE DATA

0458 ELEVON/ELEVON-HEATING

ELEVON

ELEVON

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	RN/FT /FT	PT PSIA	TT DEG. R	HT BTU/LBM	PINF PSIA	TINF DEG. R	RHO FT ¹³	VINF FT/SEC	SCALE
17	40.00	.0000	7.300	.5126+06	200.2	2008.	506.5	.3442-01	181.1	.1955-04	.4815.	.4000-01

RUN NUMBER	PHI DEG.	HS SPHERE T _W =540	MACH	RN/L	BTAA	ELEVON = .0000	ELEVON = .5000	MACH = 7.300	LENGTH = 6.000
17	.0000	.7798-01	.0000	.0000	.0000	.0000	.5000	.0000	.0000

PARAMETRIC DATA

TEST CONDITIONS

ALPHA = 40.00	BETA = .0000	ELEVON = .0000	RN/L	BTAA = .0000	ELEVON = .5000
40.00	.0000	.0000	.0000	.0000	.5000

TEST DATA

RUN NUMBER	DIM	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/FT ² SEC	QDTT BTU/FT ² SEC	HW/HIT	TW DEG. R	HW/HIT	TW DEG. R	STN NO R=0.9
17	1.0000	1.0000	.23460	.2713	.2944	29.16	6.842	.2612	551.3	.8569-02		
17	2.0000	2.0000	.19471	.2252	.2442	29.20	5.685	.2604	549.7	.7103-02		
17	3.0000	3.0000	.1052	.1162	.1260	29.25	2.940	.2593	547.3	.3666-02		
17	4.0000	4.0000	.1716	.2048	.2222	29.23	5.179	.2595	547.9	.6462-02		
17	5.0000	5.0000	.11965	.1383	.1500	29.24	3.498	.2595	547.7	.4364-02		
17	6.0000	6.0000	.27677-02	.3185-02	.3453-02	29.41	.8111-01	.2553	539.9	.1005-03		
17	7.0000	7.0000	.1669	.2043	.2216	29.23	5.165	.2596	547.9	.6445-02		
17	8.0000	8.0000	.89073-01	.1018	.1104	29.25	2.576	.2591	546.9	.3212-02		
17	9.0000	9.0000	.32726-01	.3783-01	.4103-01	29.27	.9579	.2587	546.1	.1194-02		
17	10.0000	10.0000	.67391-02	.7787-02	.8443-02	29.35	.1978	.2569	542.2	.2457-03		
17	11.0000	11.0000	.18355-03	.2121-03	.2300-03	29.31	.5380-02	.2577	544.3	.6693-05		
17	12.0000	12.0000	.31468-03	.3637-03	.3944-03	29.30	.9221-02	.2579	544.3	.1148-04		
17	14.0000	14.0000	.16085-02	.1859-02	.2016-02	29.30	.4713-01	.2579	544.4	.5866-04		
17	15.0000	15.0000	.17802	.2059	.2233	29.18	5.195	.2607	550.4	.6494-02		
17	16.0000	16.0000	.16158	.1868	.2027	29.21	4.720	.2601	549.1	.5894-02		
17	17.0000	17.0000	.16516	.1910	.2071	29.23	4.829	.2595	547.8	.6024-02		
17	18.0000	18.0000	.1446	.1670	.1812	29.23	4.223	.2595	547.9	.5269-02		
17	19.0000	19.0000	.14532	.1680	.1822	29.26	4.252	.2588	546.4	.5300-02		
17	21.0000	21.0000	.94128-01	.1086	.1181	29.19	2.748	.2605	549.9	.3434-02		
17	22.0000	22.0000	.99818-01	.1154	.1252	29.21	2.916	.2500	548.8	.3641-02		
17	23.0000	23.0000	.15641-02	.1796-02	.1947-02	29.34	.4560-01	.2571	542.6	.5657-04		

DATE 28 MAR 79

AMES OH-58 HEATING AND PRESSURE DATA

QUE S'EVANIE L'EVANGELISME

110

RUN NUMBER	DIM DUMMY	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF	000T BTU/ FT2SEC	H/HIT	TW DEG. R	STN NO R=0.9
17	1.0000	24.000	12198	1410	1529	29.25	3.568	.2592	547.1	.4449-02
17	1.0000	25.000	11895	1375	1491	29.27	3.482	.2586	433B-02	
17	1.0000	27.000	96962-02	1121-01	1216-01	29.22	.2833	.2598	548.4	.3537-03
17	1.0000	28.000	59292-02	6854-02	7434-02	29.25	.1734	.2591	546.9	.2163-03
17	1.0000	29.000	28328-02	3274-02	3551-02	29.28	.8295-01	.2584	545.4	.1033-03
17	1.0000	30.000	34440-02	3865-02	4192-02	29.28	.9792-01	.2584	545.4	.1220-03
17	1.0000	31.000	32281-02	3731-02	4046-02	29.30	.9457-01	.2581	544.7	.1177-03
17	1.0000	32.000	34962-02	4041-03	4382-03	29.31	.1025-01	.2578	544.3	.275-04

PAGE 20
IR2XA101

DATE 28 MAR 79

AMES OH58 HEATING AND PRESSURE DATA

0458 ELEVON/ELEVON-HEATING

ELEVON

ALPHA = 40.00
ELEVON = 5.000

TEST CONDITIONS
 RUN ALPHA DEG. BETA DEG. MACH RN/FT PSI A PT DEG. R HT BTU/LBM
 20 40.00 .0000 7.300 .5323+06 197.5 1951 .490.9
 RUN PHI DEG. HS SPHERE TW=540
 20 .0000 .7746-01

TEST DATA

RUN NUMBER	DIM	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/FT ² SEC	QDOT BTU/FT ² SEC	HW/HT	HW/HT	TW DEG. R	STN NO R=0.9
20	.0000	1.0000	.29100	.3371	.3660	27.81	8.094	.2682	.548.8	.1048-01	
20	.0000	2.0000	.25215	.2919	.3168	27.95	7.048	.2649	.541.8	.9079-02	
20	.0000	3.0000	.12555	.1453	.1577	27.98	3.513	.2641	.540.4	.4520-02	
20	.0000	4.0000	.23335	.2701	.2931	27.97	6.526	.2644	.541.0	.8402-02	
20	.0000	5.0000	.15217	.1761	.1912	27.97	4.256	.2644	.541.0	.5479-02	
20	.0000	6.0000	.37649-02	.4356-02	.4726-02	28.05	10.056	.2625	.537.0	.1355-03	
20	.0000	7.0000	.23124	.2676	.2905	27.96	6.465	.2646	.541.4	.8326-02	
20	.0000	8.0000	.11323	.1310	.1422	27.98	3.168	.2642	.540.6	.4076-02	
20	.0000	9.0000	.38422-01	.4446-01	.4826-01	27.99	1.075	.2639	.539.9	.1383-02	
20	.0000	10.0000	.63608-02	.7361-02	.7990-02	27.98	.1780	.2642	.540.6	.2290-03	
20	.0000	11.0000	.44898-03	.5195-03	.5637-03	28.02	.1259-01	.2631	.538.2	.1616-04	
20	.0000	12.0000	.43991-03	.5090-03	.5524-03	28.01	.1232-01	.2634	.538.9	.1584-04	
20	.0000	14.0000	.15886-02	.1838-02	.1935-02	28.01	.4450-01	.2633	.538.7	.5719-04	
20	.0000	15.0000	.23326	.2700	.2931	27.95	6.519	.2649	.541.8	.8399-02	
20	.0000	16.0000	.21032	.2434	.2612	27.96	5.882	.2645	.541.2	.7572-02	
20	.0000	17.0000	.21167	.2450	.2659	27.97	5.921	.2644	.540.9	.7621-02	
20	.0000	18.0000	.18478	.2139	.2321	27.96	5.167	.2646	.541.3	.6653-02	
20	.0000	19.0000	.17871	.2069	.2245	27.98	5.001	.2641	.540.2	.6434-02	
20	.0000	21.0000	.12367	.1431	.1554	27.96	3.458	.2647	.541.5	.4453-02	
20	.0000	22.0000	.12865	.1489	.1616	27.97	3.598	.2644	.540.9	.4632-02	
20	.0000	23.0000	.13037	.1509	.1638	27.98	3.647	.2642	.540.5	.4694-02	

PAGE 21
(REXALL)

PARAMETRIC DATA

ELEVON

BETA RN/L = .0000
BETA RN/L = .5000
LENGTH = 6.000

DATE 28 MAR 79

AMES OH58 HEATING AND PRESSURE DATA

RUN NUMBER	DIM NUMBER	T/C NO	OH58 ELEVON/ELEVON-HEATING		ELEVON		TW DEG. R	STN NO R=0.9
			H/HREF R=1.0	H/HREF R=0.9	QREF R=0.85	QDOT BTU/ FT2SEC		
20	1.0000	24.000	.15367	.1778	.1930	.27.97	.2643	.540.7
20	1.0000	25.000	.14265	.1651	.1792	.27.99	.2639	.539.8
20	1.0000	27.000	.15098-01	.1747-01	.1896-01	.27.99	.2640	.5436-02
20	1.0000	28.000	.96562-02	.1117-01	.1213-01	.28.00	.2636	.3476-03
20	1.0000	29.000	.29031-02	.3359-02	.3645-02	.28.01	.2633	.538.7
20	1.0000	30.000	.35259-02	.4082-02	.4432-02	.27.90	.2661	.1045-03
20	1.0000	31.000	.41776-02	.4837-02	.5246-02	.28.01	.2633	.1270-03
20	1.0000	32.000	.53833-03	.6232-03	.6764-03	.27.93	.1504-01	.1504-03
							.2653	.1938-04

PAGE 22
(REXAII)

DATE 29 MAR 79

AMES OH58 HEATING AND PRESSURE DATA

RUN NUMBER	DIM DUMMY	T/C NO	OH58 ELEVON/ELEVON-HEATING			ELEVON	H/H/T	TW	DEG. R	STN NO R=0.9
			H/H/REF R=1.0	H/H/REF R=0.9	H/H/REF R=0.85					
14	1.0000	24.000	.94022-01	.1088	.1180	.28.62	.2691	.2626	540.1	.3343-02
14	1.0000	25.000	.88192-01	.1020	.1107	.28.64	.2526	.2622	539.2	.3136-02
14	1.0000	27.000	.40642-02	.4702-02	.5103-02	.28.60	.1162	.2631	541.2	.1445-03
14	1.0000	28.000	.35236-02	.4076-02	.4423-02	.28.63	.1009	.2626	540.0	.1253-03
14	1.0000	29.000	.34295-02	.3967-02	.4304-02	.28.65	.9825-01	.2620	538.9	.1219-03
14	1.0000	30.000	.31739-02	.3673-02	.3987-02	.28.54	.9059-01	.2646	544.2	.1129-03
14	1.0000	31.000	.17409-02	.2014-02	.2185-02	.28.67	.4990-01	.2616	538.0	.6190-04
14	1.0000	32.000	.00000	.00000	.00000	.0000	.0000	.0000	.0000	.0000

PAGE 24
(R2XA12)

DATE 28 MAR 79

AMES OH58 HEATING AND PRESSURE DATA

OH58 ELEVON/ELEVON-HEATING

ELEVON

PAGE 25
(R2XA13)

ALPHA = 40.00 BETA = 0000 MACH = 7.300 LENGTH = 6.000

ELEVON = -10.00 R/L = .7500

PARAMETRIC DATA

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	RN/FT /FT	PT PSIA	TT DEG. R	HT BTU/ LBM	PINF PSIA	TINF DEG. R	RHO SLUGS/ FT ³	VINF FT/SEC	SCALE
15	40.00	.0000	7.300	.7552+06	296.6	1999.	504.1	.5102-01	180.2	.2376-04	4803.	.4000-01

TEST CONDITIONS

RUN NUMBER	PHI DEG.	H5 SPHERE TH-540	H491-01
15	.0000		

TEST DATA

RUN NUMBER	DIM DUMMY	T/C NO	H/HREF R=1.0	H/HREF R=0.9	QREF BTU/ FT ² SEC	Q00T BTU/ FT ² SEC	H/HF	H/HF	TH DEG. R	TH DEG. R	SIN NO R=0.9
15	1.0000	1.0000	1.3937	.1612	.1749	35.31	4.922	.2615	549.3	549.3	.4165-02
15	1.0000	2.0000	.12587	.1456	.1579	35.34	4.448	.2610	548.2	548.2	.3761-02
15	1.0000	3.0000	.70726-01	.8178-01	.8872-01	35.37	2.502	.2603	546.9	546.9	.2113-02
15	1.0000	4.0000	.12305	.1423	.1544	35.35	4.350	.2608	547.8	547.8	.3677-02
15	1.0000	5.0000	.84510-01	.9773-01	.1060	35.35	2.988	.2607	547.7	547.7	.2525-02
15	1.0000	6.0000	.00000	.00000	.00000	35.33	0.000	.0000	0.000	0.000	.0000
15	1.0000	7.0000	.12316	.1424	.1545	35.33	4.352	.2611	548.6	548.6	.3680-02
15	1.0000	8.0000	.60849-01	.7634-01	.7634-01	35.36	2.152	.2606	547.5	547.5	.1818-02
15	1.0000	9.0000	.20857-01	.2412-01	.2616-01	35.39	.7381	.2600	546.3	546.3	.6232-03
15	1.0000	10.0000	.00000	.00000	.00000	0.000	.0000	.0000	.0000	.0000	.0000
15	1.0000	11.0000	.00000	.00000	.00000	0.000	.0000	.0000	.0000	.0000	.0000
15	1.0000	12.0000	.00000	.00000	.00000	0.000	.0000	.0000	.0000	.0000	.0000
15	1.0000	13.0000	.30273-02	.3500-02	.3796-02	35.43	.1073	.2592	544.5	544.5	.9044-04
15	1.0000	14.0000	.30273-02	.3500-02	.3796-02	35.43	.1073	.2592	544.5	544.5	.9044-04
15	1.0000	15.0000	.11451	.1324	.1437	35.36	4.049	.2606	547.5	547.5	.3422-02
15	1.0000	16.0000	.10891	.1259	.1366	35.37	3.853	.2603	546.9	546.9	.3254-02
15	1.0000	17.0000	.12119	.1401	.1520	35.37	4.286	.2604	547.1	547.1	.3621-02
15	1.0000	18.0000	.10547	.1220	.1323	35.35	3.729	.2608	548.0	548.0	.3152-02
15	1.0000	19.0000	.11314	.1308	.1419	35.38	4.003	.2602	546.7	546.7	.3380-02
15	1.0000	21.0000	.66034-01	.7636-01	.8283-01	35.37	2.336	.2604	547.0	547.0	.1973-02
15	1.0000	22.0000	.71256-01	.8586-01	.9314-01	35.38	2.627	.2601	546.5	546.5	.2219-02
15	1.0000	23.0000	.00000	.00000	.00000	0.000	.0000	.0000	.0000	.0000	.0000

DATE 28 MAR 79

AMES OH58 HEATING AND PRESSURE DATA

PAGE 26
(R2XA13)

RUN NUMBER	DIM NUMBER	T/C NO	OH58 ELEVON/ELEVON-HEATING				ELEVON	STN NO R=0.9
			H/HREF R=1.0	H/HREF R=0.9	QREF R=0.85	QDT BTU/ FT2SEC		
15	1.0000	24.000	.10058	.1163	.1262	.35.37	3.558	.2604
15	1.0000	25.000	.95954-01	.1109	.1203	.35.39	3.396	.2600
15	1.0000	27.000	.48594-02	.5619-02	.6095-02	.35.40	.1720	.2598
15	1.0000	28.000	.40520-02	.4685-02	.5081-02	.35.41	.1435	.2595
15	1.0000	29.000	.35862-02	.4146-02	.4497-02	.35.42	.1270	.2593
15	1.0000	30.000	.31762-02	.3674-02	.3987-02	.35.28	.1120	.2622
15	1.0000	31.000	.00000	.0000	.0000	.35.44	.0000	.0000
15	1.0000	32.000	.77105-03	.8914-03	.9668-03	.2732-01	.2591	.2303-04

DATE 28 MAR 79

AMES 0H58 HEATING AND PRESSURE DATA

0H58 ELEVON/ELEVON-HEATING

PAGE 27

(REXA14)

ELEVON

ALPHA = 40.00
ELEVON = .0000

BETA = 0.000
RNL = 1.000

PARAMETRIC DATA

LENGTH = 6.000

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	RN/FT /FT	PT PSIA	TT DEG. R	HT BTU LBH	PINF PSIA	TINF DEG. R	RHO SLUGS/ FT ³	VINF FT/SEC	SCALE
18	40.00	.0000	7.300	.9797+06	369.1	2026.	511.6	.6675-01	162.9	.3063-04	4839.	.4000-01

RUN NUMBER PHI DEG.
HS SPHERE TH540
18 .0000 .1087

TEST DATA

RUN NUMBER	DIM DURRY	T/C NO	H/HREF R=1.0	H/HREF R=0.9	QREF BTU FT ² SEC	QDOT BTU FT ² SEC	H/H	H/H HT	TH DEG. R	STN NO R=0.9
18	1.0000	1.0000	.27028	.3129	.3396	40.92	11.03	.2651	565.3	.7124-02
18	1.0000	2.0000	.22065	.2553	.2770	40.97	9.040	.2626	559.9	.5814-02
18	1.0000	3.0000	.10195	.1179	.1279	41.05	4.185	.2613	557.1	.2686-02
18	1.0000	4.0000	.19643	.22860	.2272	41.01	8.055	.2620	558.6	.5175-02
18	1.0000	5.0000	.12860	.1488	.1614	41.02	5.275	.2618	568.2	.3388-02
18	1.0000	6.0000	.77459-02	.8947-02	.9698-02	41.42	.3209	.2550	543.6	.2039-03
18	1.0000	7.0000	.20952	.2424	.2630	40.99	8.588	.2623	559.3	.5520-02
18	1.0000	8.0000	.94613-01	.1094	.1187	41.04	3.883	.2614	557.3	.2493-02
18	1.0000	9.0000	.34982-01	.4045-01	.4388-01	41.09	1.437	.2606	555.6	.9215-03
18	1.0000	10.0000	.00000	.0000	.0000	41.00	.0000	.0000	.0000	.0000
18	1.0000	11.0000	.26917-03	.3112-03	.3375-03	41.19	.1109-01	.2589	552.1	.7089-05
18	1.0000	12.0000	.10340-02	.1195-02	.1297-02	41.17	.4257-01	.2593	552.8	.2723-04
18	1.0000	13.0000	.18528-02	.2142-02	.2323-02	41.18	.7630-01	.2591	552.4	.4880-04
18	1.0000	14.0000	.18932	.2178	.2364	41.01	7.722	.2620	558.7	.4962-02
18	1.0000	15.0000	.16886	.1930	.2094	41.04	6.848	.2615	557.5	.4396-02
18	1.0000	16.0000	.16973	.1963	.2130	41.05	6.967	.2613	557.1	.4471-02
18	1.0000	17.0000	.15366	.1777	.1928	41.03	6.304	.2616	557.9	.4048-02
18	1.0000	18.0000	.14928	.1726	.1873	41.08	6.133	.2607	555.9	.3932-02
18	1.0000	19.0000	.98412-01	.1136	.1235	41.03	4.038	.2615	557.6	.2593-02
18	1.0000	21.0000	.10205	.1180	.1280	41.06	4.190	.2611	556.8	.2688-02
18	1.0000	22.0000	.10713	.1239	.1344	41.06	4.399	.2610	556.6	.2822-02

DATE 28 MAR '79

AMES OH58 HEATING AND PRESSURE DATA

PAGE 28

RUN NUMBER	DIM DUMMY	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	oref BTU/FT2SEC	QDOT BTU/FT2SEC	H/H/HT	TH DEG. R	STN NO R=0.9
18	1.0000	24.000	.12860	.1487	.1614	.41.06	.5.280	.2612	.556.8	.3388-02
18	1.0000	25.000	.12030	.1391	.1509	.41.11	.4.915	.2603	.555.0	.3169-02
18	1.0000	27.000	.19346-01	.2237-01	.2427-01	.41.09	.7949	.2606	.555.7	.5096-03
18	1.0000	28.000	.74870-02	.86557-02	.9390-02	.41.13	.3079	.2599	.554.2	.1972-03
18	1.0000	29.000	.37805-02	.4371-02	.4741-02	.41.16	.1556	.2594	.553.2	.9957-04
18	1.0000	30.000	.41909-02	.4815-02	.5256-02	.41.15	.1724	.2596	.553.6	.1104-03
18	1.0000	31.000	.34718-02	.4017-02	.4357-02	.41.17	.1430	.2593	.552.9	.9152-04
18	1.0000	32.000	.48794-03	.5641-03	.6118-03	.41.18	.2009-01	.2591	.552.4	.1285-04

(REXA14)

ELEVON

ALPHA = 40.00 ELEVON = 5.000 RNL = .0000 MACH = 1.000 LENGTH = 6.000

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	RN/FT /FT	PT PSIA	TT DEG. R	HT LB/M	PINF PSIA	TINF DEG. R	RHO FT ³	VINF FT/SEC	SCALE
21	40.00	.0000	7.300	.1007*07	388.5	1994.	502.8	.6687-01	179.7	.3122-04	4797.	.4000-01

RUN NUMBER	DIM DUMMY	T/C NO	H/HREF	H/HREF	GREF	QDOT	HT	HW/HT	TW DEG. R	STN NO
21	1.0000	1.0000	.34381	.3984	.4327	.39.83	13.69	.2700	565.8	.8972-02
21	1.0000	2.0000	.28689	.3322	.3606	40.04	11.49	.2663	558.0	.7483-02
21	1.0000	3.0000	.12745	.1475	.1601	40.13	5.114	.2648	555.0	.3324-02
21	1.0000	4.0000	.26188	.3032	.3291	40.08	10.50	.2656	556.6	.6830-02
21	1.0000	5.0000	.16369	.1895	.2057	40.09	6.563	.2654	556.2	.4269-02
21	1.0000	6.0000	.83450-02	.9644-02	.1046-01	40.53	.3383	.2578	540.3	.2174-03
21	1.0000	7.0000	.27167	.3145	.3414	40.06	10.88	.2660	557.4	.7086-02
21	1.0000	8.0000	.12131	.1404	.1524	40.12	.4.867	.2650	555.2	.3164-02
21	1.0000	9.0000	.42113-01	.4874-01	.5289-01	40.17	1.692	.2641	553.3	.1098-02
21	1.0000	10.000	.14912-01	.1724-01	.1870-01	40.44	.6030	.2594	543.6	.3886-03
21	1.0000	11.000	.75549-03	.8740-03	.9484-03	40.27	.3042-01	.2624	549.9	.1970-01
21	1.0000	12.000	.59264-03	.6856-03	.7440-03	40.25	.2385-01	.2628	550.6	.1545-01
21	1.0000	14.000	.17527-02	.2028-02	.2200-02	40.26	.7057-01	.2625	550.1	.4570-01
21	1.0000	15.000	.23902	.2767	.3004	40.08	9.580	.2656	556.7	.6234-02
21	1.0000	16.000	.21081	.2440	.2649	40.11	8.456	.2650	555.4	.5493-02
21	1.0000	17.000	.21411	.2478	.2690	40.13	8.591	.2649	555.0	.5583-02
21	1.0000	18.000	.19382	.2244	.2435	40.10	7.772	.2653	555.9	.5055-02
21	1.0000	19.000	.18233	.2110	.2290	40.16	7.323	.2642	553.7	.4755-02
21	1.0000	21.000	.12586	.1457	.1581	40.11	5.048	.2651	555.5	.3282-02
21	1.0000	22.000	.13165	.1524	.1654	40.14	5.284	.2647	554.6	.3433-02
21	1.0000	23.000	.13441	.1555	.1688	40.16	5.398	.2643	553.8	.3505-02

TEST DATA

RUN NUMBER	DIM DUMMY	H/HREF	R=1.0	H/HREF	R=0.9	GREF	QDOT	BTU/SEC	BTU/SEC	HW/HT	TW DEG. R	STN NO
21	1.0000	1.0000	.34381	.3984	.4327	.39.83	13.69	.2700	.2700	565.8	.8972-02	
21	1.0000	2.0000	.28689	.3322	.3606	40.04	11.49	.2663	.2663	558.0	.7483-02	
21	1.0000	3.0000	.12745	.1475	.1601	40.13	5.114	.2648	.2648	555.0	.3324-02	
21	1.0000	4.0000	.26188	.3032	.3291	40.08	10.50	.2656	.2656	556.6	.6830-02	
21	1.0000	5.0000	.16369	.1895	.2057	40.09	6.563	.2654	.2654	556.2	.4269-02	
21	1.0000	6.0000	.83450-02	.9644-02	.1046-01	40.53	.3383	.2578	.2578	540.3	.2174-03	
21	1.0000	7.0000	.27167	.3145	.3414	40.06	10.88	.2660	.2660	557.4	.7086-02	
21	1.0000	8.0000	.12131	.1404	.1524	40.12	.4.867	.2650	.2650	555.2	.3164-02	
21	1.0000	9.0000	.42113-01	.4874-01	.5289-01	40.17	1.692	.2641	.2641	553.3	.1098-02	
21	1.0000	10.000	.14912-01	.1724-01	.1870-01	40.44	.6030	.2594	.2594	543.6	.3886-03	
21	1.0000	11.000	.75549-03	.8740-03	.9484-03	40.27	.3042-01	.2624	.2624	549.9	.1970-01	
21	1.0000	12.000	.59264-03	.6856-03	.7440-03	40.25	.2385-01	.2628	.2628	550.6	.1545-01	
21	1.0000	14.000	.17527-02	.2028-02	.2200-02	40.26	.7057-01	.2625	.2625	550.1	.4570-01	
21	1.0000	15.000	.23902	.2767	.3004	40.08	9.580	.2656	.2656	556.7	.6234-02	
21	1.0000	16.000	.21081	.2440	.2649	40.11	8.456	.2650	.2650	555.4	.5493-02	
21	1.0000	17.000	.21411	.2478	.2690	40.13	8.591	.2649	.2649	555.0	.5583-02	
21	1.0000	18.000	.19382	.2244	.2435	40.10	7.772	.2653	.2653	555.9	.5055-02	
21	1.0000	19.000	.18233	.2110	.2290	40.16	7.323	.2642	.2642	553.7	.4755-02	
21	1.0000	21.000	.12586	.1457	.1581	40.11	5.048	.2651	.2651	555.5	.3282-02	
21	1.0000	22.000	.13165	.1524	.1654	40.14	5.284	.2647	.2647	554.6	.3433-02	
21	1.0000	23.000	.13441	.1555	.1688	40.16	5.398	.2643	.2643	553.8	.3505-02	

DATE 28 MAR 79

AMES OH58 HEATING AND PRESSURE DATA

RUN NUMBER	DIM DUMMY	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	HREF FT2SEC	QDOT BTU/SEC	QDOT BTU/SEC	QDOT BTU/SEC	DEG. R	DEG. R	DEG. R
21	1.0000	24.000	.16131	.1867	.2026	40.15	6.476	.2645	554.2	.4206-02		
21	1.0000	25.000	.14569	.1697	.1842	40.19	5.895	.2639	552.8	.3825-02		
-21-	1.0000	27.000	.32655-01	.3779-01	.4102-01	40.16	1.312	.2642	553.6	.8515-03		
21	1.0000	28.000	.16142-01	.1869-01	.2027-01	40.21	.6490	.2634	552.0	.4209-03		
21	1.0000	29.000	.44623-02	.5163-02	.5602-02	40.24	.1796	.2629	550.8	.1163-03		
21	1.0000	30.000	.53675-02	.6213-02	.6745-02	40.08	.2151	.2656	556.5	.140-03		
21	1.0000	31.000	.39272-02	.4543-02	.4930-02	40.25	.1581	.2629	550.6	.1024-03		
21	1.0000	32.000	.64440-03	.7458-03	.8095-03	40.14	.2586-01	.2646	554.5	.1680-04		

PAGE 30

(R2XA15)

PARAMETRIC DATA									
ELEVON		ALPHA	40.00	BETA	0.000	MACH	7.300	LENGTH	6.000
		ELEVON	-10.00	RNL	1.000				
TEST CONDITIONS									
RUN	ALPHA DEG.	BETA DEG.	MACH	RNL/FT /FT	PT PSIA	TT DEG. R	HT BTU/ LBM	PINF PSIA	TINF DEG. R
16	40.00	.0000	7.300	.9443+06	394.1	2083.	527.3	.6724-01	188.5
RUN	PHI DEG.	HS SPHERE TH=540							
16	.0600	.1094							

TEST CONDITIONS

TEST DATA

RUN NUMBER	DIM DUMMY	T/C NO	H/HREF	R=1.0	H/HREF	R=0.9	GREF	QDOT	TW	STN NO
								BTU/SEC	BTU/SEC	R=0.9
16	1.0000	1.0000	1.4284	.1651	.1790	.42.76	.42.82	.5.42	.2576	.566.2
16	1.0000	2.0000	.12708	.1468	.1592	.42.93	.42.89	.2.978	.2550	.564.0
16	1.0000	3.0000	.69372-01	.8013-01	.8686-01	.42.93	.42.89	.5.190	.2556	.560.3
16	1.0000	4.0000	.12103	.1398	.1516	.42.89	.42.90	.3.647	.2555	.561.8
16	1.0000	5.0000	.85018-01	.9821-01	.0000	.0000	.0000	.0000	.0000	.561.4
16	1.0000	6.0000	.12603	.1456	.1578	.42.87	.42.87	.5.403	.2559	.562.3
16	1.0000	7.0000	.61799-01	.7139-01	.7738-01	.42.93	.42.93	.2.653	.2549	.560.2
16	1.0000	8.0000	.21850-01	.2523-01	.2735-01	.42.99	.42.99	.9.392	.2540	.558.2
16	1.0000	9.0000	.00000	.00000	.00000	.43.10	.43.10	.0000	.0000	.0000
16	1.0000	10.0000	.111112-02	.1283-02	.1390-02	.43.10	.43.09	.4.789-01	.2522	.554.2
16	1.0000	11.0000	.14931-02	.1724-02	.1868-02	.43.09	.43.09	.6.435-01	.2524	.554.6
16	1.0000	12.0000	.40931-02	.4725-02	.5.20-02	.43.09	.43.09	.1.764	.2524	.554.6
16	1.0000	13.0000	.11351	.1311	.1422	.42.86	.42.86	.4.864	.2562	.563.0
16	1.0000	14.0000	.10799	.1247	.1352	.42.89	.42.89	.4.632	.2555	.561.4
16	1.0000	15.0000	.11698	.1374	.1490	.42.93	.42.93	.5.107	.2549	.560.2
16	1.0000	16.0000	.10525	.1216	.1318	.42.92	.42.92	.4.517	.2551	.560.7
16	1.0000	17.0000	.11165	.1289	.1398	.42.98	.42.98	.4.799	.2541	.558.4
16	1.0000	18.0000	.20108-02	.2319-02	.2512-02	.43.37	.43.37	.8.153-01	.2557	.561.9
16	1.0000	19.0000	.65102-01	.7521-01	.8153-01	.42.86	.42.86	.2.792	.2552	.560.7
16	1.0000	20.0000	.72143-01	.8333-01	.9034-01	.42.91	.42.91	.3.056	.2552	.560.7
16	1.0000	21.0000	.65102-01	.7521-01	.8153-01	.42.91	.42.91	.2.792	.2557	.561.9
16	1.0000	22.0000	.72143-01	.8333-01	.9034-01	.43.37	.43.37	.3.056	.2552	.560.7
16	1.0000	23.0000	.20108-02	.2319-02	.2512-02	.43.37	.43.37	.8.720-01	.2478	.544.6

DATE 28 MAR 79

ANES 0H58 HEATING AND PRESSURE DATA

PAGE 32
(REXA16)

RUN NUMBER	DIM NUMBER	T/C NO	0H58 ELEVON/ELEVON-HEATING				ELEVON	H/HHT	TW DEG. R	STN NO R=0.9
			H/HREF R=1.0	H/HREF R=0.9	GREF BTU/	QDOT FT2SEC				
16	1.0000	24.000	.97751-01	.1129	.1224	.42.95	.4.198	.2546	.559.6	.2608-02
16	1.0000	25.000	.91817-01	.1060	.1149	.43.01	.7.949	.2536	.557.4	.2449-02
16	1.0000	27.000	.60518-02	.6990-02	.7577-02	.42.94	.2599	.2547	.559.8	.1614-03
16	1.0000	28.000	.38891-02	.4491-02	.4868-02	.42.99	.1672	.2539	.557.9	.1037-03
16	1.0000	29.000	.32376-02	.3738-02	.4051-02	.43.04	.1393	.2531	.556.2	.8635-04
16	1.0000	30.000	.29456-02	.3403-02	.3689-02	.42.89	.1263	.2555	.561.5	.7859-04
16	1.0000	31.000	.16957-02	.1958-02	.2121-02	.43.07	.7304-01	.2526	.555.1	.4523-04
16	1.0000	32.000	.10426-02	.1204-02	.1304-02	.43.09	.4493-01	.2523	.554.4	.2781-04

DATE 28 MAR 79

AMES OHSB HEATING AND PRESSURE DATA

PAGE 33
(R2XA17)

ELEVON

0H58 ELEVON/ELEVON-HEATING

	ALPHA DEG.	BETA DEG.	MACH	RN/FT /FT	PT PSIA	TT DEG. R	BTU LBH	ELEVON	ALPHA = 40.00	BETA = .0000	RN/L = 3.000	PARAMETRIC DATA
19	40.00	.0000	7.300	.2801+07	1160.	2074.	524.7	.0000	MACH = 7.300	BTU = 187.6	LENGTH = 6.000	
RUN NUMBER	PHI DEG.											
19	.0000											

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	RN/FT /FT	PT PSIA	TT DEG. R	BTU LBH	ELEVON	ALPHA = 40.00	BETA = .0000	RN/L = 3.000	PARAMETRIC DATA
19	40.00	.0000	7.300	.2801+07	1160.	2074.	524.7	.0000	MACH = 7.300	BTU = 187.6	LENGTH = 6.000	
RUN NUMBER	PHI DEG.											
19	.0000											

TEST DATA

RUN NUMBER	DIM DUMMY	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	H/HREF R=0.8	DEFF BTU FT2SEC	PARAMETRIC DATA				
19	1.0000	1.0000	.33837	.3923	.4263	.4623	71.44	24.17	24.17	24.17	.2726	.596.2
19	1.0000	2.0000	.27182	.3149	.3420	.3420	71.84	19.53	19.53	19.53	.2687	.587.7
19	1.0000	3.0000	.11641	.1347	.1462	.1462	72.31	8.49	8.49	8.49	.2643	.578.0
19	1.0000	4.0000	.28760	.33350	.3615	.3615	72.08	20.73	20.73	20.73	.2665	.582.7
19	1.0000	5.0000	.15520	.1797	.1961	.1961	72.11	11.19	11.19	11.19	.2661	.582.0
19	1.0000	6.0000	.00000	.00000	.00000	.00000	72.00	.0000	.0000	.0000	.0000	.2109-02
19	1.0000	7.0000	.32535	.3768	.4091	.4091	72.00	23.42	23.42	23.42	.2673	.584.4
19	1.0000	8.0000	.10621	.1229	.1334	.1334	72.33	7.683	7.683	7.683	.2641	.577.5
19	1.0000	9.0000	.35199	.4070-01	.4415-01	.4415-01	72.71	2.559	2.559	2.559	.2604	.569.5
19	1.0000	10.000	.00000	.00000	.00000	.00000	72.71	.0000	.0000	.0000	.0000	.5460-03
19	1.0000	11.000	.92165	.1064-02	.1154-01	.1154-01	73.41	.6766	.6766	.6766	.2638	.565.1
19	1.0000	12.000	.66035	.7625-02	.8265-02	.8265-02	73.42	.4848	.4848	.4848	.2537	.554.9
19	1.0000	14.000	.77548	.8956-02	.9706-02	.9706-02	73.40	.5692	.5692	.5692	.2639	.555.3
19	1.0000	15.000	.39573	.4582	.4974	.4974	72.13	.28.54	.28.54	.28.54	.2660	.581.8
19	1.0000	16.000	.38451	.4450	.4830	.4830	72.33	27.81	27.81	27.81	.2641	.577.5
19	1.0000	17.000	.41963	.4855	.5268	.5268	72.48	30.41	30.41	30.41	.2627	.574.4
19	1.0000	18.000	.35900	.4154	.4508	.4508	72.43	26.00	26.00	26.00	.2631	.575.4
19	1.0000	19.000	.30125	.3483	.3778	.3778	72.79	21.93	21.93	21.93	.2597	.567.9
19	1.0000	21.000	.31393	.3635	.3943	.3943	72.34	22.71	22.71	22.71	.2640	.577.3
19	1.0000	22.000	.33981	.3931	.4266	.4266	72.48	21.63	21.63	21.63	.2627	.574.5
19	1.0000	23.000	.34114	.3945	.4279	.4279	72.71	21.80	21.80	21.80	.2605	.569.7

DATE 28 MAR 79

AMES OH5B HEATING AND PRESSURE DATA

PAGE 34
(REXA17)

RUN NUMBER	DIM DUMMY	T/C NO	0458 ELEVON/ELEVON-HEATING						ELEVON	STN NO R=0.9
			H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/FT12SEC	QDOT BTU/FT12SEC	TW DEG. R		
19	1.0000	24.000	.35563	.4113	.4462	72.66	25.84	.2609	570.6	.5517-02
19	1.0000	25.000	.30205	.3491	.3786	72.98	22.04	.2579	564.1	.4684-02
19	1.0000	27.000	.50968-01	.5895-01	.6396-01	72.58	3.699	.2617	572.3	.7908-03
19	1.0000	28.000	.75580-02	.8738-02	.9477-02	72.83	.5505	.2593	567.0	.1172-03
19	1.0000	29.000	.19209-01	.2220-01	.2407-01	73.07	1.404	.2571	562.2	.2979-03
19	1.0000	30.000	.13265-01	.1533-01	.1662-01	73.11	.9698	.2567	561.3	.2057-03
19	1.0000	31.000	.18939-02	.2188-02	.2372-02	73.25	.1387	.2553	558.4	.2936-04
19	1.0000	32.000	.14946-01	.1726-01	.1871-01	73.40	1.097	.2539	555.2	.2317-03

DATE 28 MAR 79

AMES OH58 HEATING AND PRESSURE DATA

PAGE 35
(R2XAI8)

ELEVON

OH58 FUSELAGE/ELEVON-HEATING

ELEVON

		ALPHA = 30.00	BETA = .0000	MACH = .5000	LENGTH = 14.40
		DEG.	MIN/L		

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	RN/FT /FT	PT PSIA	T ⁴ DEG. R	HT BTU/ LBH	PINF PSIA	TINF DEG. R	RHO SLUGS/ FT ³	VINF FT/SEC	SCALE
31	30.00	.0000	7.300	.5082+06	195.9	1993.	502.4	.3373-01	179.6	.1576-04	4795.	.4000-01

RUN NUMBER	PHI DEG.	H ₅ SPHERE TH=540	T ₁ =7714-01
31	.0000		

TEST DATA

RUN NUMBER	DIM DUMMY	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QDOT BTU/ FT ² SEC	H/H REF	QREF BTU/ FT ² SEC	QDOT BTU/ FT ² SEC	H/H REF	QREF BTU/ FT ² SEC	H/H REF	QREF BTU/ FT ² SEC	STN NO R=0.9
31	1.0000	1.0000	.89785-01	.1039	.1128	28.50	2.559	.2644	.553.6	.3295-02				
31	1.0000	2.0000	.72609-01	.8403-01	.9120-01	28.51	2.070	.2641	.553.0	.2665-02				
31	1.0000	3.0000	.38051-01	.4409-01	.4784-01	28.52	1.086	.2639	.552.3	.1398-02				
31	1.0000	4.0000	.77469-01	.8965-01	.9730-01	28.51	2.299	.2639	.552.7	.2843-02				
31	1.0000	5.0000	.46804-01	.5416-01	.5978-01	28.52	1.335	.2639	.552.7	.1718-02				
31	1.0000	6.0000	.23631-01	.2735-01	.29689-01	28.52	.6739	.2639	.552.6	.8672-03				
31	1.0000	7.0000	.61153-01	.7077-01	.7681-01	28.51	1.744	.2639	.552.6	.2244-02				
31	1.0000	8.0000	.28502-01	.3298-01	.35680-01	28.51	.8127	.2639	.552.8	.1046-02				
31	1.0000	9.0000	.10251-01	.1196-01	.1287-01	28.52	.2924	.2639	.552.3	.3762-03				
31	1.0000	10.0000	.44223-01	.5118-01	.5554-01	28.51	1.261	.2639	.552.7	.1623-02				
31	1.0000	11.0000	.00000	.00000	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
31	1.0000	12.0000	.00000	.00000	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
31	1.0000	13.0000	.00000	.00000	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
31	1.0000	14.0000	.00000	.00000	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
31	1.0000	15.0000	.64376-01	.7451-01	.8087-01	28.49	1.834	.2645	.553.9	.2363-02				
31	1.0000	16.0000	.62832-01	.7272-01	.7892-01	28.50	1.791	.2643	.553.4	.2306-02				
31	1.0000	17.0000	.67131-01	.7769-01	.8431-01	28.51	1.914	.2640	.552.7	.2464-02				
31	1.0000	18.0000	.73952-01	.85569-01	.92889-01	28.51	2.108	.2641	.553.0	.2714-02				
31	1.0000	19.0000	.71156-01	.8234-01	.8937-01	28.51	2.029	.2640	.552.9	.2611-02				
31	1.0000	20.0000	.37418-01	.4333-01	.4700-01	28.49	1.065	.2645	.553.8	.373-02				
31	1.0000	21.0000	.46511-01	.53883-01	.5842-01	28.50	1.326	.2642	.553.2	.1707-02				
31	1.0000	22.0000	.57138-01	.6612-01	.7176-01	28.52	1.629	.2639	.552.6	.2097-02				

DATE 28 MAR 79

AMES OH58 HEATING AND PRESSURE DATA

OH58 FUSelage/ELEVon+HEATING

RUN NUMBER	DIM DUMMY	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HM/HT	HM/HT	TM DEG. R	STN NO R=0.9
31	1.0000	24.000	.65248-01	.7551-01	.8195-01	28.51	1.860	.2641	.553.1	.2395-02	
31	1.0000	25.000	.58505-01	.6770-01	.7348-01	28.51	1.668	.2639	.552.7	.2147-02	
31	1.0000	27.000	.30087-02	.3482-02	.3779-02	28.51	.8578-01	.2640	.552.8	.1104-03	
31	1.0000	28.000	.27334-02	.3163-02	.3433-02	28.52	.7797-01	.2637	.552.2	.1003-03	
31	1.0000	29.000	.21833-02	.2526-02	.2742-02	28.53	.6228-01	.2637	.552.1	.8012-04	
31	1.0000	30.000	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
31	1.0000	31.000	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
31	1.0000	32.000	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	

PAGE 36
(R2XA18)

DATE 28 MAR 79

AMES OH58 HEATING AND PRESSURE DATA

(R2XA19)

		OH58 FUSELAGE/ELEVON-HEATING				ELEVON	HM/HT	TH	STN NO R=0.9
RUN NUMBER	DIM. DUMMY	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	GREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	DEG.	R
30	1.0000	24.000	.15302	.1771	.1922	.28.39	.2636	554.6	.5688-02
30	1.0000	25.000	.12210	.1413	.1533	.28.39	.2634	554.2	.4539-02
30	1.0000	27.000	.19979-01	.2312-01	.2509-01	.28.39	.2635	554.4	.7427-03
30	1.0000	28.000	.73772-02	.85356-02	.9263-02	.28.40	.2095	553.7	.2742-03
30	1.0000	29.000	.26602-02	.3078-02	.3340-02	.28.40	.7556-01	553.6	.9888-04
30	1.0000	30.000	.00000	.0000	.0000	.0000	.0000	.0000	.0000
30	1.0000	31.000	.00000	.0000	.0000	.0000	.0000	.0000	.0000
30	1.0000	32.000	.00000	.0000	.0000	.0000	.0000	.0000	.0000

PAGE 38

DATE 28 MAR 79

AMES 0458 HEATING AND PRESSURE DATA

0458 FUSELAGE/ELEVON-HEATING

ELEVON

PAGE 39
(R2XA20)ALPHA = 30.00
ELEVON = -10.00

ELEVON

.0000 MACH = 7.300
.5000 LENGTH = 14.40

PARAMETRIC DATA

PINF
PSIA
DEG. R
BTU/LB/HTINF
DEG. R
BTU/LB/HRHO
SLUGS/FT³VINF
FT/SEC

SCALE

.3267-01 180.6 .1518-04 4809. .4000-01

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PINF/FT PSIA	TINF DEG. R	HT BTU/LB/H	PINF PSIA	TINF DEG. R	RHO SLUGS/FT ³	VINF FT/SEC	SCALE	
33	30.00	.0000	7.300	.4884+06	190.0	2003.	505.2	.3267-01	180.6	.1518-04	4809.	.4000-01

TEST DATA

RUN NUMBER	DIM DUMMY	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	GREF FT2SEC	ODOT BTU/FT2SEC	H/H REF	HT BTU/LB/H	TW DEG. R	STN NO R=0.9
33	1.0000	1.0000	.64911-01	.75069-01	.8146-01	.28.33	1.839	.2615	550.7	.2427-02	.1913-02
33	1.0000	2.0000	.51165-01	.5918-01	.620-01	.28.33	1.450	.2614	550.4	.1092-02	.1967-02
33	1.0000	3.0000	.29208-01	.3378-01	.3665-01	.28.34	.8277	.2613	550.2	.1092-02	.1967-02
33	1.0000	4.0000	.52599-01	.6084-01	.6600-01	.28.33	1.490	.2614	550.5	.1388-02	.6496-03
33	1.0000	5.0000	.37113-01	.4293-01	.4657-01	.28.33	1.051	.2614	550.5	.1388-02	.6496-03
33	1.0000	6.0000	.17346-01	.2006-01	.2177-01	.28.33	.4914	.2615	550.6	.1597-02	.1597-02
33	1.0000	7.0000	.42706-01	.49339-01	.53559-01	.28.33	1.210	.2615	550.6	.1597-02	.1597-02
33	1.0000	8.0000	.21900-01	.25333-01	.27478-01	.28.33	.6204	.2615	550.6	.8189-03	.2710-03
33	1.0000	9.0000	.72480-02	.83833-02	.90985-02	.28.34	.2054	.2613	550.3	.1155-02	.1155-02
33	1.0000	10.0000	.30892-01	.3573-01	.3877-01	.28.33	.8752	.2615	550.6	.0000	.0000
33	1.0000	11.0000	.00000	.00000	.00000	.0000	.00000	.0000	.0000	.0000	.0000
33	1.0000	12.0000	.00000	.00000	.00000	.0000	.00000	.0000	.0000	.0000	.0000
33	1.0000	13.0000	.00000	.00000	.00000	.0000	.00000	.0000	.0000	.0000	.0000
33	1.0000	14.0000	.00000	.00000	.00000	.0000	.00000	.0000	.0000	.0000	.0000
33	1.0000	15.0000	.50555-01	.5847-01	.6384-01	.28.32	1.432	.2617	551.0	.1890-02	.1878-02
33	1.0000	16.0000	.50229-01	.5899-01	.6302-01	.28.33	1.422	.2616	550.9	.1878-02	.1778-02
33	1.0000	17.0000	.47546-01	.5499-01	.5966-01	.28.33	1.347	.2614	550.5	.1732-02	.1732-02
33	1.0000	18.0000	.46318-01	.5257-01	.5813-01	.28.32	1.312	.2616	550.9	.1536-02	.1536-02
33	1.0000	19.0000	.41075-01	.4751-01	.5154-01	.28.33	1.164	.2617	551.0	.1013-02	.1013-02
33	1.0000	20.0000	.27086-01	.31353-01	.3539-01	.28.32	.7671	.2615	550.7	.1064-02	.1064-02
33	1.0000	21.0000	.28449-01	.3291-01	.3570-01	.28.33	.8059	.2614	550.4	.1127-02	.1127-02
33	1.0000	22.0000	.30135-01	.3465-01	.3781-01	.28.33	.8638				

DATE 28 MAR 79
AMES OH-58 HEATING AND PRESSURE DATA

UNIQUE EMISSIONS HEATING

THE ESTATE OF EWYN HEATON

RUN NUMBER	DIM DUMMY	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	GREF R=0.9	GREF R=0.85	QDOT BTU/SEC	QDOT BTU/SEC	HW/HT DEG. A	TW DEG. A	STN NO R=0.9
33	1.0000	24.000	.35923-01	.4155-01	.4508-01	.45381-01	.45381-01	.28.32	.28.32	.2617	.551.0	.1343-02
33	1.0000	25.000	.34911-01	.4038-01	.4368-01	.4368-01	.4368-01	.28.32	.28.32	.2615	.550.6	.1305-02
33	1.0000	27.000	.31625-02	.3658-02	.3968-02	.3968-02	.3968-02	.28.33	.28.33	.2614	.550.4	.1183-03
33	1.0000	28.000	.29048-02	.3360-02	.3645-02	.3645-02	.3645-02	.28.34	.28.34	.2613	.550.2	.1086-03
33	1.0000	29.000	.25173-02	.2911-02	.3159-02	.3159-02	.3159-02	.28.34	.28.34	.2613	.550.2	.9413-04
33	1.0000	30.000	.18883-02	.2184-02	.2370-02	.2370-02	.2370-02	.28.32	.28.32	.2617	.551.0	.7061-04
33	1.0000	31.000	.71721-03	.8295-03	.9000-03	.9000-03	.9000-03	.28.33	.28.33	.2615	.550.5	.2682-04
33	1.0000	32.000	.00000	.00000	.00000	.00000	.00000	.0000	.0000	.0000	.0000	.0000

DATE 28 MAR 79

AMES 0H58 HEATING AND PRESSURE DATA

0H58 FUSELAGE/ELEVON-HEATING

PAGE 41
(R2XA21)

ELEVON

	ALPHA DEG.	BETA DEG.	MACH	RN/FT /FT	PT PSIA	TT DEG. R	HT BTU/LBM	PINF PSIA	TINF DEG. R	RHO SLUGS/FT ³	VINF FT/SEC	SCALE
ELEVON				RN/L					MACH		LENGTH =	14.40
									7.300			

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	RN/FT /FT	PT PSIA	TT DEG. R	HT BTU/LBM	PINF PSIA	TINF DEG. R	RHO SLUGS/FT ³	VINF FT/SEC	SCALE
32	30.00	.0000	7.300	.7785+06	292.5	1965.	.494.6	.5049-01	176.8	.2396-04	4758.	.4000-01
RUN NUMBER	PHI DEG.		HS SPHERE TH=540									
32	.0000		.9426-01									

TEST DATA

RUN NUMBER	DIM DURRY	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	GREF BTU/FT ² SEC	QOT BTU/FT ² SEC	HW/HF	HW/HF	TH DEG. R	STN NO R=0.9
32	1.0000	1.0000	.10186	.1180	.1281	34.12	3.475	.2679	.552.2	.3030-02	
32	1.0000	2.0000	.80226-01	.9291-01	.1009	34.14	2.739	.2675	.551.4	.2386-02	
32	1.0000	3.0000	.43312-01	.5015-01	.5445-01	34.16	1.490	.2669	.550.3	.1288-02	
32	1.0000	4.0000	.94499-01	.1094	.1188	34.15	3.227	.2673	.550.9	.2811-02	
32	1.0000	5.0000	.54228-01	.6280-01	.6819-01	34.15	1.852	.2672	.550.9	.1613-02	
32	1.0000	6.0000	.28823-01	.3338-01	.3624-01	34.15	.9844	.2671	.550.7	.8573-03	
32	1.0000	7.0000	.78596-01	.9102-01	.9883-01	34.14	2.684	.2673	.551.1	.2338-02	
32	1.0000	8.0000	.34104-01	.3949-01	.4288-01	34.15	1.165	.2672	.550.8	.1014-02	
32	1.0000	9.0000	.12125-01	.1404-01	.1524-01	34.17	.4143	.2668	.550.0	.3606-03	
32	1.0000	10.0000	.64819-01	.7506-01	.8150-01	34.16	2.214	.2671	.550.6	.1928-02	
32	1.0000	11.0000	.00000	.00000	.00000		.0000	.0000	.0000	.0000	
32	1.0000	12.0000	.00000	.00000	.00000		.0000	.0000	.0000	.0000	
32	1.0000	14.0000	.00000	.00000	.00000		.0000	.0000	.0000	.0000	
32	1.0000	15.000	.11360	.1316	.1429	34.11	3.875	.2680	.552.5	.3379-02	
32	1.0000	16.000	.11221	.1300	.1411	34.12	3.829	.2677	.551.9	.3338-02	
32	1.0000	17.000	.12085	.1399	.1520	34.15	4.127	.2672	.550.9	.3595-02	
32	1.0000	19.000	.12524	.1450	.1575	34.14	4.275	.2674	.551.3	.3725-02	
32	1.0000	19.000	.11985	.1388	.1507	34.16	4.094	.2670	.550.5	.3565-02	
32	1.0000	21.000	.71130-01	.8236-01	.8946-01	34.12	2.427	.2679	.552.2	.2116-02	
32	1.0000	22.000	.86974-01	.1007	.1094	34.13	2.969	.2675	.551.5	.2587-02	
32	1.0000	23.000	.10213	.1183	.1284	34.16	3.489	.2671	.550.5	.3038-02	

DATE 28 MAR 79

AMES OH-58 HEATING AND PRESSURE DATA

AMES OH-58 HEATING AND PRESSURE DATA

PAGE 42
(R2XA21)

DATE 28 MAR 79

AMES OH58 HEATING AND PRESSURE DATA

THE EYES OF EVEN-HEATING

61

B18

```

ALPHA = 30.00    BETA = .00000    MACH = 7.300    LENGTH = 14.40
ELEVON = 10.00    ROLL = .75000

```

*****TEST CONDITIONS*****

28	.20.00	.0000	7.300	.7867+06	289.7	1943.	^{LBM} 488.7	.5012-01	174.7	.2408-.04	4729.	F13	.4000-01
----	--------	-------	-------	----------	-------	-------	----------------------	----------	-------	-----------	-------	-----	----------

RUN NUMBER	PHI DEG.	HS SPHERE TH=540
28	.0000	9301-01

TEST DATA

UN NUMBER	DIM DIMENT	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	ODOT BTU/ FT2SEC	HM/HIT	TH Deg. R	STN NO R=0.9
28	1.0000	1.7667	.2048	.2225	33.39	5.898	.2713	552.6	.5241-02
28	2.0000	.21314	.2470	.2683	33.41	7.122	.2708	551.5	.6323-02
28	3.0000	.87067-01	.1009	.1096	33.45	2.912	.2701	550.0	.2582-02
28	4.0000	.18049	.2092	.2272	33.43	6.034	.2704	550.7	.5354-02
28	5.0000	.12826	.1486	.1615	33.43	4.288	.2704	550.7	.3804-02
28	6.0000	.49055-01	.5685-01	.6175-01	33.43	1.640	.2703	550.6	.1455-02
28	7.0000	.16471	.1909	.2074	33.42	5.505	.2706	551.0	.9886-02
28	8.0000	.70926-01	.8219-01	.8728-01	33.43	2.371	.2705	550.9	.2104-02
28	9.0000	.20893-01	.2421-01	.2630-01	33.45	.6988	.2701	550.1	.6197-03
28	10.000	.16893	.1958	.2126	33.43	5.648	.2704	550.7	.5011-02
28	11.000	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
28	12.000	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
28	13.000	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
28	14.000	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
28	15.000	.23846	.2763	.3002	33.42	7.969	.2707	551.3	.7073-02
28	16.000	.24483	.2884	.3132	33.43	8.318	.2704	550.8	.7381-02
28	17.000	.29024	.3363	.3653	33.44	9.707	.2701	550.2	.8609-02
28	18.000	.30184	.3498	.3800	33.43	10.09	.2705	550.9	.8983-02
28	19.000	.29363	.3403	.3696	33.44	9.620	.2701	550.2	.8710-02
28	20.000	.17911	.2076	.2255	33.43	5.987	.2705	550.9	.5333-02
28	22.000	.23618	.2737	.2973	33.44	7.898	.2702	550.3	.7006-02
28	23.000	.31161	.3611	.3922	33.45	10.42	.2699	549.7	.9243-02

PAGE 43
(R2XA22)

DATE 28 MAR 79

AMES 0458 HEATING AND PRESSURE DATA

			0458 FUSELAGE/ELEVON-HEATING			ELEVON	H/H/T	TW DEG. R	
RUN NUMBER	DIM DUMMY	T/C NO	H/H/REF R=1.0	H/H/REF R=0.9	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	H/H/T	STN NO R=0.9	
28	1.0000	24.000	.33698	.3905	.4242	33.43	11.27	.2703	550.6
28	1.0000	25.000	.29486	.3417	.3711	33.45	9.863	.2700	549.9
28	1.0000	27.000	.22970-01	.2662-01	.2891-01	33.45	.7684	.2700	549.8
28	1.0000	28.000	.87754-02	.1017-01	.1104-01	33.47	.2937	.2696	549.1
28	1.0000	29.000	.31633-02	.3665-02	.3981-02	33.47	.1059	.2696	549.1
28	1.0000	30.000	.46685-02	.5410-02	.5877-02	33.43	.1561	.2704	550.6
28	1.0000	31.000	.67630-03	.7836-03	.6512-03	33.46	.2263-01	.2699	549.6
28	1.0000	32.000	.00000	.00000	.0000	.0000	.0000	.0000	.0000

PAGE 44
(R2XA22)

DATE 28 MAR 79

AMES OH5B HEATING AND PRESSURE DATA

OH5B FUSELAGE/ELEVON-HEATING

ELEVON

ALPHA = 30.00
ELEVON = -10.00
ELEVON

BETA =
RN/L =

00000
.75000

PINF =
PSIA =

174.6
.5075-01

HT =
BTU/

DEG. R
LBH =

1942.
488.5

RHO =
SLUGS/

F13 =
FT/SEC =

VINF =
FT/SEC =

7.300
.2439-04

LENGTH =
4728.

MACH =
MACH =

7.300
.75000

PARAMETRIC DATA

PINF =
PSIA =

TINF =
DEG. R =

RHO =
SLUGS/

F13 =
FT/SEC =

VINF =
FT/SEC =

7.300
.2439-04

LENGTH =
4728.

MACH =
MACH =

7.300
.75000

PINF =
PSIA =

TINF =
DEG. R =

RHO =
SLUGS/

F13 =
FT/SEC =

VINF =
FT/SEC =

7.300
.2439-04

LENGTH =
4728.

MACH =
MACH =

7.300
.75000

PINF =
PSIA =

TINF =
DEG. R =

RHO =
SLUGS/

F13 =
FT/SEC =

VINF =
FT/SEC =

7.300
.75000

TEST CONDITIONS

PINF =
PSIA =

TINF =
DEG. R =

RHO =
SLUGS/

F13 =
FT/SEC =

VINF =
FT/SEC =

7.300
1.0000

LENGTH =
4728.

MACH =
MACH =

7.300
.75000

PINF =
PSIA =

TINF =
DEG. R =

RHO =
SLUGS/

F13 =
FT/SEC =

VINF =
FT/SEC =

7.300
1.0000

LENGTH =
4728.

MACH =
MACH =

7.300
.75000

PINF =
PSIA =

TINF =
DEG. R =

RHO =
SLUGS/

F13 =
FT/SEC =

VINF =
FT/SEC =

7.300
1.0000

LENGTH =
4728.

MACH =
MACH =

7.300
.75000

PINF =
PSIA =

TINF =
DEG. R =

RHO =
SLUGS/

F13 =
FT/SEC =

VINF =
FT/SEC =

7.300
1.0000

LENGTH =
4728.

MACH =
MACH =

7.300
.75000

TEST DATA

PINF =
PSIA =

TINF =
DEG. R =

RHO =
SLUGS/

F13 =
FT/SEC =

VINF =
FT/SEC =

7.300
1.0000

LENGTH =
4728.

MACH =
MACH =

7.300
.75000

PINF =
PSIA =

TINF =
DEG. R =

RHO =
SLUGS/

F13 =
FT/SEC =

VINF =
FT/SEC =

7.300
1.0000

LENGTH =
4728.

MACH =
MACH =

7.300
.75000

PINF =
PSIA =

TINF =
DEG. R =

RHO =
SLUGS/

F13 =
FT/SEC =

VINF =
FT/SEC =

7.300
1.0000

LENGTH =
4728.

MACH =
MACH =

7.300
.75000

PINF =
PSIA =

TINF =
DEG. R =

RHO =
SLUGS/

F13 =
FT/SEC =

VINF =
FT/SEC =

7.300
1.0000

LENGTH =
4728.

MACH =
MACH =

7.300
.75000

DATE 28 MAR 79

AMES 0H58 HEATING AND PRESSURE DATA

0H58 FUSELAGE/ELEVON-HEATING

PAGE 46
(R2XA23)

RUN NUMBER	DIM DUMMY	T/C NO	H/HREF R=1.0	H/HREF R=0.9	QREF R=0.85	QDOT BTU/ FT2SEC	HW/HIT DEG. R	ELEVON TW STN NO R=0.9
34	1.0000	24.000	.67402-01	.7812-01	.8487-01	33.59	.2712	.552.2 .987-02
34	1.0000	25.000	.69076-01	.8006-01	.8697-01	33.60	.2710	.551.8 .2036-02
34	1.0000	27.000	.32330-02	.3747-02	.4070-02	33.63	.1087	.2704 .550.4 .5528-04
34	1.0000	28.000	.28094-02	.3256-02	.3536-02	33.63	.9449-01	.2703 .550.3 .6280-04
34	1.0000	29.000	.27276-02	.3161-02	.3434-02	33.62	.9171-01	.2705 .550.9 .6039-04
34	1.0000	30.000	.14500-02	.1681-02	.1826-02	33.58	.4870-01	.2713 .552.3 .4274-04
34	1.0000	31.000	.00000	.00000	.00000	.0000	.0000	.0000 .0000 .0000
34	1.0000	32.000	.00000	.00000	.00000	.0000	.0000	.0000 .0000 .0000

DATE 28 MAR 79

AMES OH5B HEATING AND PRESSURE DATA

OH5B FUSELAGE/ELEVON-HEATING

PAGE 47

ELEVON

(R2XA241)

	ALPHA DEG.	BETA DEG.	MACH	RN/FT /FT	PT PSIA	TT DEG. R	HT BTU/ LBH	PINF PSIA	TINF DEG. R	RHO SLUGS/ FT ³	VINF FT/SEC	SCALE
ELEVON												
	30.00	.0000	7.300	.7711+06	289.3	1963.	494.2	.4995-01	176.7	.2373-04	4756.	.4000-01

TEST CONDITIONS

RUN NUMBER	RUN NUMBER	PHI DEG.	HS SPHERE TH=540 9374-01	RN/L	BETA RN/L	MACH	PT PSIA	TT DEG. R	HT BTU/ LBH	PINF PSIA	TINF DEG. R	RHO SLUGS/ FT ³	VINF FT/SEC	SCALE
24	24													

TEST DATA

RUN NUMBER	DIM DUMMY	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	GREF	QDOT	HH/HT BTU/ FT ² SEC	HH/HT BTU/ FT ² SEC	HH/HT BTU/ FT ² SEC	HH/HT DEG. R	TH DEG. R	STN NO R=0.9
24	1.0000	1.0000	.94012-01	.90119-01	.1089	.1183	.9827-01	33.87	3.184	2.648	.2685	.552.9	.2810-02
24	1.0000	2.0000	.78126-01	.78126-01	.4491-01	.4879-01	.33.90	1.315	2.742	.2681	.552.2	.2335-02	
24	1.0000	3.0000	.39797-01	.4491-01	.9372-01	.1018	.33.89	2.742	.2681	.2679	.551.8	.1160-02	
24	1.0000	4.0000	.80913-01	.80913-01	.5534-01	.6010-01	.33.88	1.619	.2682	.2681	.552.2	.2419-02	
24	1.0000	5.0000	.47779-01	.47779-01	.2856-01	.3102-01	.33.89	.8357	.8357	.2682	.552.4	.1428-02	
24	1.0000	6.0000	.61659-01	.61659-01	.7663-01	.8322-01	.33.88	2.241	.2681	.2681	.552.2	.7371-03	
24	1.0000	7.0000	.66156-01	.66156-01	.33937-01	.35889-01	.33.88	.9935	.9935	.2681	.552.7	.1978-02	
24	1.0000	8.0000	.29324-01	.29324-01	.1252-01	.1360-01	.33.90	.3665	.3665	.2683	.552.5	.8766-03	
24	1.0000	9.0000	.10813-01	.10813-01	.6105-01	.6630-01	.33.88	1.786	.1.786	.2683	.551.9	.3222-03	
24	1.0000	10.000	.52709-01	.52709-01	.0000	.0000	.0000	.0000	.0000	.0000	.552.5	.1576-02	
24	1.0000	11.000	.00000	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
24	1.0000	12.000	.00000	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
24	1.0000	13.000	.00000	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
24	1.0000	14.000	.00000	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	
24	1.0000	15.000	.85062-01	.9854-01	.9747-01	.1070	.33.86	2.880	.2.880	.2687	.553.4	.2543-02	
24	1.0000	16.000	.84145-01	.9747-01	.1059	.1059	.33.87	2.850	.2.850	.2686	.553.1	.2516-02	
24	1.0000	17.000	.88238-01	.1022	.1110	.33.89	2.990	.2.990	.2681	.552.1	.2638-02		
24	1.0000	18.000	.93556-01	.1084	.1177	.33.87	3.169	.2.169	.2684	.552.8	.2797-02		
24	1.0000	19.000	.89727-01	.1039	.1129	.33.88	3.040	.2.040	.2682	.552.5	.2682-02		
24	1.0000	20.000	.47785-01	.5535-01	.6011-01	.6211-01	.33.86	1.618	.2686	.553.2	.1429-02		
24	1.0000	21.000	.57741-01	.6688-01	.7263-01	.7363-01	.33.88	1.956	.2683	.552.5	.1726-02		
24	1.0000	22.000	.69155-01	.8010-01	.8638-01	.8310-01	.33.90	2.344	.2679	.551.8	.2067-02		

DATE 28 MAR 79

AMES OH-58 HEATING AND PRESSURE DATA

PAGE 48
(R2XA24)

RUN NUMBER	DIM DUMMY	T/C NO	OH-58 FUSELAGE/ELEVON-HEATING				ELEVON	HM/HT	TW	STN NO R=0.9
			H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC				
24	1.0000	24.000	.78723-01	.9119-01	.9903-01	33.88	2.667	.2684	.552.7	.2353-02
24	1.0000	25.000	.71714-01	.8306-01	.9020-01	33.88	2.430	.2681	.552.1	.2144-02
24	1.0000	27.000	.48209-02	.5584-02	.6064-02	33.88	.1634	.2680	.552.0	.1441-03
24	1.0000	28.000	.34292-02	.3972-02	.4313-02	33.91	.1163	.2677	.551.4	.1025-03
24	1.0000	29.000	.24149-02	.2797-02	.3037-02	33.91	.8189-01	.2677	.551.3	.7219-04
24	1.0000	30.000	.00000	.00000	.00000	.0000	.0000	.0000	.0000	.0000
24	1.0000	31.000	.00000	.00000	.00000	.0000	.0000	.0000	.0000	.0000
24	1.0000	32.000	.58919-03	.6824-03	.7409-03	33.91	.1998-01	.2676	.551.1	.1761-04

DATE 28 MAR 79

AMES 0H58 HEATING AND PRESSURE DATA

0H58 FUSELAGE/ELEVON-HEATING

ELEVON

PAGE 49
(R2XA25)

	ALPHA ELEVON	30.00 10.00	BETA RN/L	.0000 .7500	MACH	7.300	LENGTH	14.40
--	-----------------	----------------	--------------	----------------	------	-------	--------	-------

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	MACH	RN/FT /FT	PT PSIA	TT DEG. R	HT BTU/ LBH	PINF PSIA	TINF DEG. R	RHO SLUGS/ FT ³	VINF FT/SEC	SCALE
26	30.00	.0000	7.300	.7608+06	288.6	1975.	.4977-01	177.9	.2348-04	4772.	.4000-01

RUN NUMBER	PHI DEG.	HS SPHERE TW=540 .9363-01
26	.0000	

TEST DATA

RUN NUMBER	DIM DUMMY	T/C NO	H/HREF R=1.0	H/HREF R=0.9	QREF R=0.85	QDOT BTU/ FT ² SEC	HH/HT	TW DEG. R	STN NO R=0.9	
26	1.0000	1.0000	.16977	.1967	.2137	33.95	.5763	.2706	561.1	.5105-02
26	1.0000	2.0000	.22013	.2551	.2771	33.97	7.477	.2702	560.2	.6619-02
26	1.0000	3.0000	.80433-01	.9321-01	.1013	33.94	2.730	.2705	561.1	.2419-02
26	1.0000	4.0000	.16639	.1928	.2094	33.98	5.653	.2700	559.8	.5003-02
26	1.0000	5.0000	.11749	.1351	.1479	33.97	3.991	.2701	560.0	.3533-02
26	1.0000	6.0000	.40785-01	.4726-01	.5133-01	33.97	1.396	.2700	559.9	.1226-02
26	1.0000	7.0000	.12733	.1475	.1603	33.96	4.325	.2702	560.3	.3829-02
26	1.0000	8.0000	.56619-01	.6561-01	.7127-01	33.97	1.923	.2702	560.2	.1703-02
26	1.0000	9.0000	.17711-01	.2052-01	.2229-01	33.98	.6019	.2698	559.4	.5325-03
26	1.0000	10.0000	.85527-01	.9911-01	.1076	33.97	2.905	.2701	560.1	.2572-02
26	1.0000	11.0000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000
26	1.0000	12.0000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000
26	1.0000	13.0000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000
26	1.0000	14.0000	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000
26	1.0000	15.0000	.24941	.2890	.3139	33.96	8.470	.2703	560.5	.7500-02
26	1.0000	16.0000	.24903	.2886	.3135	33.96	8.458	.2702	560.3	.7488-02
26	1.0000	17.0000	.25544	.2960	.3215	33.99	8.682	.2698	559.4	.7681-02
26	1.0000	18.0000	.25313	.2933	.3186	33.97	8.599	.2701	560.0	.7611-02
26	1.0000	19.0000	.22081	.2559	.2779	33.98	7.503	.2699	559.7	.6640-02
26	1.0000	20.0000	.20816	.2415	.2620	33.97	7.070	.2702	560.3	.6759-02
26	1.0000	22.0000	.26363	.3055	.3318	33.98	8.959	.2698	559.5	.7927-02
26	1.0000	23.0000	.30909	.3581	.3890	34.00	10.51	.2695	558.9	.9294-02

AMES OH58 HEATING AND PRESSURE DATA
DATE 28 MAR 79

CHESS FOR BEGINNERS

DATE 28 MAR 79

AMES OH-58 HEATING AND PRESSURE DATA

OH58 FUSELAGE/ELEVON-HEATING ELEVON

PAGE 51
(R2XA26)

ELEVON

ALPHA DEG. ELEVON

= 30.00 = .0000

BETA R/L

= .0000

MACH = 1.000

PARAMETRIC DATA

ALPHA = 30.00
ELEVON = .0000
BETA R/L = .0000
MACH = 1.000
LENGTH = 14.40

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	RN/FT /FT	PT PSIA	T DEG. R	HT BTU LBM	PINF PSIA	TINF DEG. R	RHO SLUGS/ FT ³	VINF FT/SEC	SCALE
25	30.00	.0000	7.300	.1031+07	389.5	1971.	496.2	.6720-01	177.4	.3179-04	4766.	.4000-01

RUN NUMBER	PHI DEG.	HS SPHERE TH=540	TS=1088
25	.0000		

TEST DATA

RUN NUMBER	DIM DUMMY	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF FT2SEC	Q00T FT2SEC	H/H HT	TW DEG. R	STN NO R=0.9
25	1.0000	1.0000	1.1095	1.1266	1.1396	39.37	4.368	.2699	558.2	.2867-02
25	1.0000	2.0000	.89941-01	.1042	.1132	39.39	3.543	.2696	557.5	.2324-02
25	1.0000	3.0000	.45353-01	.5254-01	.5707-01	39.41	1.787	.2693	556.8	.1172-02
25	1.0000	4.0000	.10469	.1213	.1317	39.39	4.124	.2696	557.5	.2705-02
25	1.0000	5.0000	.59545-01	.6899-01	.7493-01	39.40	2.346	.2695	557.3	.1538-02
25	1.0000	6.0000	.33691-01	.3903-01	.4240-01	39.40	1.328	.2694	557.1	.8705-03
25	1.0000	7.0000	.93194-01	.1080	.1173	39.39	3.671	.2697	557.8	.2408-02
25	1.0000	8.0000	.44406-01	.5145-01	.5588-01	39.39	1.749	.2696	557.5	.1147-02
25	1.0000	9.0000	.14929-01	.1730-01	.1730-01	39.41	.5884	.2692	556.8	.3857-03
25	1.0000	10.000	.84861-01	.9832-01	.1068	39.39	3.343	.2696	557.6	.2193-02
25	1.0000	11.000	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
25	1.0000	12.000	.02000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
25	1.0000	14.000	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
25	1.0000	15.000	.17178	.1991	.2162	39.34	6.758	.2704	559.3	.4439-02
25	1.0000	16.000	.17375	.2013	.2187	39.36	6.838	.2702	558.9	.4490-02
25	1.0000	17.000	.18744	.2172	.2359	39.39	7.383	.2697	557.8	.4843-02
25	1.0000	18.000	.19076	.2210	.2401	39.37	7.510	.2700	558.4	.4929-02
25	1.0000	19.000	.18727	.2170	.2357	39.38	7.375	.2698	557.9	.4839-02
25	1.0000	21.000	.12169	.1410	.1532	39.35	4.789	.2703	559.1	.3144-02
25	1.0000	22.000	.15267	.1769	.1921	39.37	6.010	.2700	558.4	.3945-02
25	1.0000	23.000	.18072	.2274	.2274	39.40	7.119	.2695	557.4	.4669-02

DATE 28 MAR 79
AMES 0458 HEATING AND PRESSURE DATA

OH58 FUSELAGE/ELEVON-HEATING ELEVON

RUN NUMBER	DIM DUMMY	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	0REF BTU/FT2SEC	000T BTU/FT2SEC	H/H/T	TW DEG. R	STN NO R=0.9
25	1.0000	24 .000	19584	.2269	.2465	39.37	7.71	.2700	558.3	.5060-02
25	1.0000	25 .000	18901	.2190	.2379	39.39	7.446	.2696	557.6	.4884-02
25	1.0000	27 .000	50427-02	.5843-02	.6346-02	39.40	1.987	.2695	557.4	.1303-03
25	1.0000	28 .000	.34344-02	.3979-02	.4321-02	39.42	1.354	.2692	556.7	.8873-04
25	1.0000	29 .000	.24309-02	.2816-02	.3059-02	39.43	.9568-01	.2690	556.3	.6280-04
25	1.0000	30 .000	.16426-02	.1903-02	.2067-02	39.39	.6470-01	.2695	557.6	.4244-04
25	1.0000	31 .000	.00000	.00000	.00000	.0000	.0000	.0000	.0000	.0000
25	1.0000	32 .000	.00000	.00000	.00000	.0000	.0000	.0000	.0000	.0000

DATE 28 MAR '79

AMES 0458 HEATING AND PRESSURE DATA

0458 FUSELAGE/ELEVON-HEATING

ELEVON

PAGE 53

(R2X271)

	ALPHA = 30.00	BETA = 0.000	ELEVON	PARAMETRIC DATA
	ELEVON = 10.00	R/N/L		MACH = 1.000
				LENGTH = 14.40

	ALPHA = 30.00	BETA = 0.000	ELEVON	PARAMETRIC DATA
	ELEVON = 10.00	R/N/L		MACH = 1.000
				LENGTH = 14.40

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	R/N/FT /FT	PT PSIA	TT DEG. R	HT BTU/LB ¹	PINF PSIA	TINF DEG. R	RHO SLUGS/FT ³	VINF FT/SEC	SCALE
29	30.00	.0000	7.300	.9799+06	393.6	2039.	515.1	.6744-01	161.2	.3073-04	4856.	.4000-01

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	R/N/FT /FT	PT PSIA	TT DEG. R	HT BTU/LB ¹	PINF PSIA	TINF DEG. R	RHO SLUGS/FT ³	VINF FT/SEC	SCALE
29	30.00	.0000	7.300	.9799+06	393.6	2039.	515.1	.6744-01	161.2	.3073-04	4856.	.4000-01

TEST DATA

RUN NUMBER	DIM DUMMY	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	GREF BTU/FT ² SEC	QREF BTU/FT ² SEC	ODOT BTU/FT ² SEC	HTH DEG. R	TH DEG. R	HTH DEG. R	TH DEG. R	STN NO R=0.9
29	1.0000	1.0000	1.0000	1.0000	1.0000	18989	2195	2380	41.76	7.929	2580	563.9	.9994-02
29	1.0000	2.0000	2.0000	2.0000	2.0000	.23239	.2686	.2912	41.79	9.710	.2575	562.9	.6112-02
29	1.0000	3.0000	3.0000	3.0000	3.0000	.92927-01	.1074	.1164	41.82	3.887	.2669	561.5	.2944-02
29	1.0000	4.0000	4.0000	4.0000	4.0000	.205602	.2381	.2582	41.80	6.612	.2572	562.3	.5418-02
29	1.0000	5.0000	5.0000	5.0000	5.0000	.138880	.1604	.1739	41.80	5.802	.2572	562.2	.3650-02
29	1.0000	6.0000	6.0000	6.0000	6.0000	.49716-01	.5745-01	.6229-01	41.81	2.079	.2571	552.0	.1307-02
29	1.0000	7.0000	7.0000	7.0000	7.0000	.17281	.1987	.2166	41.79	7.222	.2674	562.7	.4545-02
29	1.0000	8.0000	8.0000	8.0000	8.0000	.75523-01	.8727-01	.9463-01	41.80	3.157	.2572	552.2	.1986-02
29	1.0000	9.0000	9.0000	9.0000	9.0000	.24004-01	.2774-01	.3008-01	41.82	1.004	.2669	561.5	.6313-03
29	1.0000	10.0000	10.0000	10.0000	10.0000	.13776	.1592	.1726	41.80	5.758	.2573	562.4	.3623-02
29	1.0000	11.0000	11.0000	11.0000	11.0000	.44659-03	.5157-03	.5592-03	41.86	1.868-01	.2664	550.4	.1174-04
29	1.0000	12.0000	12.0000	12.0000	12.0000	.15472-03	.1788-03	.1938-03	41.84	.6475-02	.2567	551.0	.1068-05
29	1.0000	14.0000	14.0000	14.0000	14.0000	.52920-03	.6114-06	.6629-03	41.85	.2215-01	.2564	550.5	.1392-04
29	1.0000	15.0000	15.0000	15.0000	15.0000	.24980	.2887	.3131	41.76	10.43	.2580	563.8	.6570-02
29	1.0000	16.0000	16.0000	16.0000	16.0000	.25858	.2988	.3241	41.78	10.80	.2577	553.2	.6801-02
29	1.0000	17.0000	17.0000	17.0000	17.0000	.31117	.3596	.3899	41.80	13.01	.2573	562.4	.8183-02
29	1.0000	18.0000	18.0000	18.0000	18.0000	.33258	.3844	.4168	41.78	13.89	.2576	553.1	.8747-02
29	1.0000	19.0000	19.0000	19.0000	19.0000	.32542	.3761	.4078	41.80	13.60	.2573	562.5	.8558-02
29	1.0000	21.0000	21.0000	21.0000	21.0000	.20374	.2355	.2553	41.77	8.511	.2578	563.4	.5358-02
29	1.0000	22.0000	22.0000	22.0000	22.0000	.26431	.3054	.3312	41.79	11.05	.2574	552.6	.6951-02
29	1.0000	23.0000	23.0000	23.0000	23.0000	.33512	.3872	.4199	41.81	14.01	.2571	551.9	.8813-02

DATE 28 MAR 79

AMES OH58 HEATING AND PRESSURE DATA

		OH58 FUSELAGE/ELEVON-HEATING				ELEVON	HW/HT		TW	STN NO R=0.9
RUN NUMBER	DIM DUMMY	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	OREF BTU/ FT2SEC	DDOT BTU/ FT2SEC	DEG. R		
29	1.0000	24.000	.36733	.4245	.4603	41.79	15.35	.2575	.552.9	.9660-02
29	1.0000	25.000	.34995	.4044	.4385	41.81	14.63	.2572	.552.1	.9203-02
29	1.0000	27.000	.21704-01	.2508-01	.2719-01	41.82	.9077	.2569	.551.5	.5707-03
29	1.0000	28.000	.87608-02	.1012-01	.1098-01	41.85	.3666	.2565	.550.7	.2304-03
29	1.0000	29.000	.26411-02	.3052-02	.3309-02	41.84	.1105	.2565	.550.7	.6945-04
29	1.0000	30.000	.00000	.00000	.00000	.0000	.0000	.0000	.0000	.0000
29	1.0000	31.000	.00000	.00000	.00000	.0000	.0000	.0000	.0000	.0000
29	1.0000	32.000	.00000	.00000	.00000	.0000	.0000	.0000	.0000	.0000

PAGE - 54
(R2XA27)

DATE 28 MAR 79

AMES OX5B HEATING AND PRESSURE DATA

OX5B FUSELAGE/ELEVON-HEATING

ELEVON

ALPHA = 30.00
ELEVON = -10.00

BETA = 0000
RNL = 1.000

MACH = 7.300
LENGTH = 14.40

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	RN/FT /FT	PT PSIA	TT DEG. R	HT LBM	PINF PSIA	TINF DEG. R	RHO FT ³	VINF FT/SEC	SCALE
35	30.00	.0000	7.300	.9764+06	391.2	2036.	514.4	.6706-01	183.9	.3060-04	4852.	.4000-01

RUN NUMBER PH1 DEG.
35 .0000 HS SPHERE
TH=540 1090

TEST DATA

RUN NUMBER	DIM DUMMY	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	GREF	OOT BTU/ FT2SEC	H/HFT	TH DEG. R	STN NO R=0.9
35	1.0000	1.0000	.69064-01	.7984-01	.8659-01	41.52	2.868	.2589	555.1	.1820-02
35	1.0000	2.0000	.55269-01	.6369-01	.6929-01	41.54	2.296	.2587	554.6	.1457-02
35	1.0000	3.0000	.36928-01	.4268-01	.4629-01	41.55	1.534	.2585	554.2	.9733-03
35	1.0000	4.0000	.69337-01	.8015-01	.8693-01	41.53	2.880	.2588	554.8	.1828-02
35	1.0000	5.0000	.51287-01	.59229-01	.6430-01	41.53	2.130	.2587	554.7	.1352-02
35	1.0000	6.0000	.29462-01	.2847-01	.3098-01	41.54	1.023	.2587	554.6	.6192-03
35	1.0000	7.0000	.65496-01	.7570-01	.8210-01	41.52	2.719	.2589	555.1	.1726-02
35	1.0000	8.0000	.31498-01	.3641-01	.3949-01	41.53	1.308	.2589	554.8	.8302-03
35	1.0000	9.0000	.96705-02	.1118-01	.1212-01	41.55	.4018	.2585	554.2	.2549-03
35	1.0000	10.0000	.51035-01	.5699-01	.6398-01	41.53	2.119	.2588	554.9	.345-02
35	1.0000	11.0000	.00000	.00000	.00000	.0000	.0000	.0000	.0000	.0000
35	1.0000	12.0000	.00000	.00000	.00000	.0000	.0000	.0000	.0000	.0000
35	1.0000	14.000	.00000	.00000	.00000	.0000	.0000	.0000	.0000	.0000
35	1.0000	15.000	.80271-01	.9220-01	.1007	41.50	3.332	.2592	555.8	.2116-02
35	1.0000	16.000	.86637-01	.1002	.1085	41.52	3.597	.2590	555.3	.2224-02
35	1.0000	17.000	.97833-01	.1131	.1227	41.52	4.062	.2589	555.0	.2579-02
35	1.0000	18.000	.98117-01	.1134	.1230	41.51	4.073	.2592	555.5	.2366-02
35	1.0000	19.000	.97213-01	.1124	.1219	41.52	4.036	.2590	555.3	.2562-02
35	1.0000	21.000	.54171-01	.6263-01	.6793-01	41.50	2.248	.2592	555.7	.1428-02
35	1.0000	22.000	.64442-01	.7450-01	.8080-01	41.52	2.676	.2590	555.2	.1699-02
35	1.0000	23.000	.73540-01	.8501-01	.9220-01	41.53	3.054	.2588	554.8	.1938-02

DATE 28 MAR 79

AMES OH58 HEATING AND PRESSURE DATA

RUN NUMBER	DIM DUMMY	T/C NO	OH58 FUSELAGE/ELEVON-HEATING			ELEVON	MM/HIT	TH DEG. R	STN NO R=0.9
			H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85				
35	1.0000	24.000	.85868-01	.9927-01	.1077	41.50	.2592	555.7	.2263-02
35	1.0000	25.000	.89958-01	.1040	.1128	41.52	.2589	555.1	.2371-02
35	1.0000	27.000	.31545-02	.3646-02	.3954-02	41.55	.1311	.2586	554.2
35	1.0000	28.000	.29848-02	.3450-02	.3741-02	41.56	.1241	.2582	553.6
35	1.0000	29.000	.29865-02	.3452-02	.3744-02	41.56	.1241	.2583	.7866-04
35	1.0000	30.000	.00000	.00000	.00000	.0000	.0000	.0000	.7871-04
35	1.0000	31.000	.00000	.00000	.00000	.0000	.0000	.0000	.0000
35	1.0000	32.000	.00000	.00000	.00000	.0000	.0000	.0000	.0000

PAGE 56
(R2XA2B)

DATE 28 MAR 79

AMES 0458 HEATING AND PRESSURE DATA

0458 FUSELAGE/ELEVON-HEATING

ELEVON

	ALPHA DEG.	BETA DEG.	MACH	RN/FT /FT	PT PSIA	TT DEG. R	HT BTU/ LBM	PINF PSIA	TINF DEG. R	RHO SLUGS/ FT ³	VINF FT/SEC	SCALE
	30.00	.0000	7.300	.1563+07	576.7	1945.	489.2	.9974-01	174.9	.4786-04	4732.	.4000-01

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	RN/FT /FT	PT PSIA	TT DEG. R	HT BTU/ LBM	PINF PSIA	TINF DEG. R	RHO SLUGS/ FT ³	VINF FT/SEC	SCALE
23	30.00	.0000	7.300	.1563+07	576.7	1945.	489.2	.9974-01	174.9	.4786-04	4732.	.4000-01

RUN NUMBER	PHI DEG.	H5 SPHERE TH=540 1324
23	.0000	

TEST DATA

RUN NUMBER	DIM DUMMY	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	OREF BTU/ FT ² SEC	OOTT BTU/ FT ² SEC	HM/HIT	HM/HIT	HM/HIT	HM/HIT	STN NO R=0.9
23	1.0000	1.0000	1.1060	.1281	.1391	47.36	5.238	.2682	546.8	.2326-02		
23	1.0000	2.0000	.89391-01	.1035	.1124	47.42	4.239	.2674	545.1	.1880-02		
23	1.0000	3.0000	.44676-01	.5173-01	.5616-01	47.50	2.122	.2662	542.8	.9395-03		
23	1.0000	4.0000	.10357	.1199	.1302	47.46	4.916	.2668	543.9	.2179-02		
23	1.0000	5.0000	.58328-01	.6753-01	.7332-01	47.49	2.770	.2664	543.2	.1227-02		
23	1.0000	6.0000	.32817-01	.3799-01	.4125-01	47.51	1.559	.2661	542.6	.6901-03		
23	1.0000	7.0000	.92080-01	.1066	.1158	47.46	4.370	.2668	544.0	.1936-02		
23	1.0000	8.0000	.421949-01	.4857-01	.5273-01	47.50	1.993	.2662	542.8	.8821-03		
23	1.0000	9.0000	.12952-01	.1499-01	.1629-01	47.54	6.157	.2657	541.7	.2723-03		
23	1.0000	10.0000	.85751-01	.9929-01	.1078	47.49	4.072	.2664	543.2	.1803-02		
23	1.0000	11.0000	.19478-02	.2254-02	.2447-02	47.59	.9269-01	.2650	540.2	.4095-04		
23	1.0000	12.0000	.10062-03	.1163-03	.1261-03	47.59	.4789-02	.2619	540.1	.2116-05		
23	1.0000	14.0000	.11286-02	.1306-02	.1418-02	47.59	.5370-01	.2650	540.2	.2373-04		
23	1.0000	15.0000	.19382	.2245	.2439	47.32	9.173	.2688	548.0	.4077-02		
23	1.0000	16.0000	.19601	.2305	.2503	47.37	9.428	.2681	546.6	.4186-02		
23	1.0000	17.0000	.21597	.2501	.2715	47.45	10.25	.2670	544.4	.4542-02		
23	1.0000	18.0000	.21786	.2523	.2739	47.43	10.33	.2672	544.8	.4582-02		
23	1.0000	19.0000	.20390	.2361	.2563	47.48	9.680	.2666	543.5	.4288-02		
23	1.0000	21.0000	.14041	.1626	.1766	47.34	6.647	.2686	547.6	.2954-02		
23	1.0000	22.0000	.18048	.2090	.2270	47.39	8.563	.2678	546.0	.3796-02		
23	1.0000	23.0000	.21444	.2483	.2696	47.47	10.18	.2667	543.8	.4510-02		

DATE 28 MAR 79

AMES 0458 HEATING AND PRESSURE DATA

0458 FUSelage/ELEVon-HEATING

PAGE 58
(R2X429)

RUN NUMBER	DIM DUMMY	T/C NO	H/HREF R=1.0	H/HREF R=0.9	GREF R=0.85	QDOT BTU/SEC	MM/HT DEG. R	STN NO R=0.9
23	1.0000	24.000	.22854	.2646	.2874	47.44	10.81	.4806-02
23	1.0000	25.000	.21539	.2494	.2707	47.49	10.23	.4529-02
23	1.0000	27.000	.67363-02	.7801-02	.8471-02	47.41	.3194	.1417-03
23	1.0000	28.000	.37564-02	.4349-02	.4722-02	47.48	.1783	.7899-04
23	1.0000	29.000	.23576-02	.2729-02	.2963-02	47.54	.1121	.4957-04
23	1.0000	30.000	.00000	.00000	.00000	0.000	.0000	.0000
23	1.0000	31.000	.21924-02	.2538-02	.2755-02	47.56	.2654	.4610-04
23	1.0000	32.000	.12237-02	.1416-02	.1538-02	47.58	.5622-01	.2573-04

DATE 28 MAR 79

AMES OH5B HEATING AND PRESSURE DATA

0458 FUSELAGE/ELEVON-HEATING

ELEVON

PAGE 59
(R2XA30)

	ALPHA	30.00	BETA	0.000	MACH	7.300	LENGTH	14.40
	ELEVON	10.00	RNL	1.500				

TEST CONDITIONS

	MACH	RNL/FT	PT /PSIA	TT DEG. R	HT BTU/LBM	PINF PSIA	TINF DEG. R	RHO SLUGS/FT ³	VINF FT/SEC	SCALE

	PHI DEG.	HS SPHERE TW=540 1W=328	RNL/FT	PT /PSIA	TT DEG. R	HT BTU/LBM	PINF PSIA	TINF DEG. R	RHO SLUGS/FT ³	VINF FT/SEC	SCALE

TEST DATA

RUN NUMBER	DIM DURRY	T/C NO	H/HREF R=1.0	H/HREF R=0.9	QREF R=0.85	QDOT BTU/FT ² SEC	HW/HT	TW DEG. R	STN NO R=0.9
27	1.0000	1.0000	.21185	.2452	.2661	49.58 10.50	.2641	568.7	4545-02
27	1.0000	2.0000	.24605	.2847	.3089	49.65 12.22	.2631	556.5	5278-02
27	1.0000	3.0000	.90918-01	.1052	.1141	49.78 4.526	.2613	552.7	1950-02
27	1.0000	4.0000	.22187	.2566	.2785	49.74 11.03	.2619	554.0	4759-02
27	1.0000	5.0000	.14211	.1644	.1783	49.75 7.070	.2616	553.5	3048-02
27	1.0000	6.0000	.53192-01	.6152-01	.6674-01	49.78 2.648	.2613	552.7	1141-02
27	1.0000	7.0000	.20680	.2392	.2595	49.74 10.29	.2619	554.0	4436-02
27	1.0000	8.0000	.84158-01	.9734-01	.1056	49.77 4.189	.2614	553.0	1805-02
27	1.0000	9.0000	.23534-01	.2722-01	.2953-01	49.81 1.172	.2608	551.7	5047-03
27	1.0000	10.0000	.23058	.2667	.2893	49.77 11.48	.2615	553.1	4945-02
27	1.0000	11.0000	.00000	.00000	.00000	.0000 0.0000	.0000	.0000	.0000
27	1.0000	12.0000	.00000	.00000	.00000	.0000 0.0000	.0000	.0000	.0000
27	1.0000	14.0000	.00000	.00000	.00000	.0000 0.0000	.0000	.0000	.0000
27	1.0000	15.0000	.27883	.3226	.3501	49.63 13.84	.2633	557.1	5982-02
27	1.0000	16.0000	.28418	.3288	.3569	49.67 14.12	.2628	555.8	6096-02
27	1.0000	17.0000	.32517	.3761	.4081	49.75 16.18	.2618	553.7	6974-02
27	1.0000	18.0000	.35177	.4069	.4415	49.73 17.49	.2620	554.2	7545-02
27	1.0000	19.0000	.35423	.4097	.4445	49.78 17.63	.2613	552.7	7597-02
27	1.0000	21.0000	.21487	.2486	.2698	49.65 10.67	.2630	556.4	4609-02
27	1.0000	22.0000	.27539	.3186	.3457	49.70 13.69	.2623	555.0	5907-02
27	1.0000	23.0000	.33507	.3875	.4205	49.77 16.68	.2615	553.1	7186-02

DATE 28 MAR 79

AMES OH5B HEATING AND PRESSURE DATA

OH5B FUSELAGE/ELEVON-HEATING

RUN NUMBER	DIM DUMMY	T/C NO	H/HREF R=1.0	H/HREF R=0.9	ELEVON	ODOT BTU/ FT ² SEC	HM/HT	TH DEG. R	STN NO R=0.9
27	1.0000	24.000	.36082	.4174	.4528	49.75	17.95	.2617	553.6
27	1.0000	25.000	.33683	.3895	.4226	49.80	16.77	.2610	552.2
27	1.0000	27.000	.26911-01	.3113-01	.3378-01	49.73	1.338	.2620	554.2
27	1.0000	28.000	.10892-01	.1260-01	.1367-01	49.78	.5422	.2613	552.7
27	1.0000	29.000	.44915-02	.5194-02	.5635-02	49.83	.2238	.2606	551.3
27	1.0000	30.000	.99747-02	.1154-01	.1251-01	49.80	.4967	.2610	552.2
27	1.0000	31.000	.00000	.0000	.0000	.0000	.0000	.0000	.0000
27	1.0000	32.000	.00000	.0000	.0000	.0000	.0000	.0000	.0000

PAGE 60
(REXA30)

DATE 28 MAR 79

AMES OH5B HEATING AND PRESSURE DATA

OH5B FUSelage/ELEVon-HEATING

ELEVON

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	RN/FT FT	P _T PSIA	T _T DEG. R	H _T BTU/LB _M	BETA RN/L	0000 MACH	7.300 MACH	LENGTH = 14.40
36	30.00	.0000	7.300	.1414+07	587.1	2077.	525.6	.1002	187.9	.4476-04	4905.

ELEVON

PARAMETRIC DATA		
ALPHA = 30.00	BETA = 0000	LENGTH = 14.40
ELEVON = -10.00	RN/L = 1.500	

TEST CONDITIONS

RUN NUMBER	PHI DEG.	HS SPHERE TH=540
36	.0000	.1335

SCALE

TEST DATA

RUN NUMBER	DIM DUMMY	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/FT ² SEC	0001 BTU/FT ² SEC	HH/HT	DEG. R	HH/HT	DEG. R	STN NO R=0.9
36	1.0000	1.0000	.65379-01	.7550-01	.8183-01	52.31	3.420	.2539	556.1	.1426-02		
36	1.0000	2.0000	.52494-01	.6061-01	.6569-01	52.36	2.748	.2533	554.8	.1145-02		
36	1.0000	3.0000	.35855-01	.4139-01	.4485-01	52.42	1.880	.2524	552.9	.7818-03		
36	1.0000	4.0000	.66465-01	.7674-01	.8316-01	52.39	3.482	.2529	554.0	.1449-02		
36	1.0000	5.0000	.50669-01	.5850-01	.63339-01	52.41	2.655	.2526	553.4	.1105-02		
36	1.0000	6.0000	.23491-01	.2712-01	.2939-01	52.42	1.231	.2524	552.9	.5122-03		
36	1.0000	7.0000	.62020-01	.7161-01	.7760-01	52.38	3.219	.2530	554.2	.1352-02		
36	1.0000	8.0000	.30156-01	.3481-01	.3773-01	52.41	1.581	.2526	553.2	.6576-03		
36	1.0000	9.0000	.88126-02	.1017-01	.1102-01	52.45	.4622	.2521	552.2	.1922-03		
36	1.0000	10.0000	.48300-01	.5576-01	.6043-01	52.40	2.531	.2527	553.6	.1053-02		
36	1.0000	11.0000	.92119-03	.1063-02	.1152-02	52.49	.4835-01	.2515	551.0	.2009-04		
36	1.0000	12.0000	.00000	.00000	.00000	.0000	.0000	.0000	.0000	.0000	.0000	
36	1.0000	13.0000	.00000	.00000	.00000	.0000	.0000	.0000	.0000	.0000	.0000	
36	1.0000	14.0000	.00000	.00000	.00000	.0000	.0000	.0000	.0000	.0000	.0000	
36	1.0000	15.0000	.95374-01	.1101	.1194	52.29	4.987	.2542	556.9	.2080-02		
36	1.0000	16.0000	.99773-01	.1152	.1249	52.33	5.221	.2537	555.7	.2176-02		
36	1.0000	17.0000	.10844	.1252	.1357	52.37	5.679	.2532	554.6	.2365-02		
36	1.0000	18.0000	.10493	.1212	.1313	52.35	5.493	.2534	555.1	.2288-02		
36	1.0000	19.0000	.10030	.1158	.1255	52.38	5.234	.2530	554.2	.2187-02		
36	1.0000	21.0000	.70252-01	.8113-01	.8794-01	52.29	3.674	.2541	556.7	.1532-02		
36	1.0000	22.0000	.85695-01	.9895-01	.1072	52.33	4.485	.2536	555.5	.1869-02		
36	1.0000	23.0000	.87359-01	.1009	.1093	52.38	4.576	.2530	554.1	.1905-02		

DATE 28 MAR 79

AMES OH58 HEATING AND PRESSURE DATA

RUN NUMBER	DIM NUMBER	T/C NO	OH58 FUSELAGE/ELEVON-HEATING			ELEVON	HM/HF	TW	DEG. R	STN NO R=0.9
			H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85		QREF BTU/ FT2SEC			
36	1.0000	24.00	.94589-01	.1092	.1184	52.35	4.952	.2534	555.0	.2063-02
36	1.0000	25.00	.95089-01	.1098	.1190	52.39	4.982	.2528	553.8	.2074-02
36	1.0000	27.00	.23593-02	.2724-02	.2952-02	52.38	.1236	.2530	554.2	.5145-04
36	1.0000	28.00	.26536-02	.3063-02	.3320-02	52.43	.1391	.2524	552.8	.5786-04
36	1.0000	29.00	.24499-02	.2828-02	.3064-02	52.45	.1285	.2520	552.1	.5342-04
36	1.0000	30.00	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
36	1.0000	31.00	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
36	1.0000	32.00	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000

PAGE 62
(R2XA31)

DATE 28 MAR 78

AMES OH5B HEATING AND PRESSURE DATA

OH5B ELEVON/ELEVON-HEATING

FLAT PLATE

FLAT PLATE

	ALPHA DEG.	BETA DEG.	MACH	RN/FT /FT	PT PSIA	TT DEG. R	HT BTU/LBM	P _{INF} PSIA	T _{INF} DEG. R	RHO SLUGS/FT ³	V _{INF} FT/SEC	SCALE
	30.00	.0000	30.00	.0000	BETA RN/L	= .0000	= .5000	MACH = .0000	MACH = 7.300	LENGTH = 7.800		

TEST CONDITIONS

RUN NUMBER	PHI DEG.	HS SPHERE TH=540	HS SPHERE TH=.7593-01	RN/FT /FT	PT PSIA	TT DEG. R	HT BTU/LBM	P _{INF} PSIA	T _{INF} DEG. R	RHO SLUGS/FT ³	V _{INF} FT/SEC	SCALE
1	30.00	.0000	7.300	.5360+06	189.8	1901.	.477.1	.3297-01	170.6	.1622-04	4673.	.4000-01

RUN NUMBER	Y	X	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/FT ² SEC	QDOT BTU/FT ² SEC	H/H _T	H/H _T	STN NO R=0.9
- .25000	7.5500	96.000	.1031	.1196	.1300	.3064	26.22	2.703	.2761	.2760	.549.0
-.00000	.90000	75.000	.2429	.2818	.2384	.2193	26.22	.369	.369	.369	.548.9
-.00000	1.5000	76.000	.1890	.1890	.1953	.1953	26.22	.957	.957	.957	.548.7
-.00000	1.8750	77.000	.1684	.1684	.2124	.2124	26.23	.416	.416	.416	.548.4
-.00000	3.0000	78.000	.0000	.0000	.0000	.0000	26.23	.000	.000	.000	.6080-02
-.00000	3.9000	79.000	.1273	.1477	.1606	.1606	26.23	.3.340	.2758	.2758	.0000
-.00000	5.8500	80.000	.1015	.1178	.1280	.1280	26.24	.664	.2758	.2758	.4598-02
-.00000	6.3000	84.000	.8664-01	.9937-01	.1080	.1080	26.21	.245	.2762	.2762	.2666-02
-.00000	6.9000	85.000	.8660-01	.1028	.1118	.1118	26.22	.323	.2761	.2761	.3093-02
-.00000	7.5500	87.000	.1144	.1328	.1443	.1443	26.21	.999	.2762	.2762	.3199-02
-.00000	7.5500	88.000	.1312	.1523	.1655	.1655	26.22	3.441	.2760	.2760	.4131-02
-.25000											.4739-02

TEST DATA

RUN NUMBER	Y	X	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/FT ² SEC	QDOT BTU/FT ² SEC	H/H _T	H/H _T	STN NO R=0.9
- .25000	7.5500	96.000	.1031	.1196	.1300	.3064	26.22	2.703	.2761	.2760	.549.0
-.00000	.90000	75.000	.2429	.2818	.2384	.2193	26.22	.369	.369	.369	.548.9
-.00000	1.5000	76.000	.1890	.1890	.1953	.1953	26.22	.957	.957	.957	.548.7
-.00000	1.8750	77.000	.1684	.1684	.2124	.2124	26.23	.416	.416	.416	.548.4
-.00000	3.0000	78.000	.0000	.0000	.0000	.0000	26.23	.000	.000	.000	.6080-02
-.00000	3.9000	79.000	.1273	.1477	.1606	.1606	26.23	.3.340	.2758	.2758	.0000
-.00000	5.8500	80.000	.1015	.1178	.1280	.1280	26.24	.664	.2758	.2758	.4598-02
-.00000	6.3000	84.000	.8664-01	.9937-01	.1080	.1080	26.21	.245	.2762	.2762	.2666-02
-.00000	6.9000	85.000	.8660-01	.1028	.1118	.1118	26.22	.323	.2761	.2761	.3093-02
-.00000	7.5500	87.000	.1144	.1328	.1443	.1443	26.21	.999	.2762	.2762	.3199-02
-.00000	7.5500	88.000	.1312	.1523	.1655	.1655	26.22	3.441	.2760	.2760	.4131-02
-.25000											.4739-02

PAGE 63
(R2XB01)

DATE 28 MAR 79

AMES 0H58 HEATING AND PRESSURE DATA
0H58 ELEVON/ELEVON-HEATING

PAGE 64
(REXB02)

FLAT PLATE

FLAT PLATE

ALPHA = 30.00
ELEVON = 5.000
MACH = .0000
RNL = .5000

PARAMETRIC DATA

ALPHA = 30.00
ELEVON = 5.000
MACH = .0000
RNL = .5000

HS
SPHERE
TW=51.0
7653.01

TEST CONDITIONS

RUN ALPHA BETA PT T_{IN}
NUMBER DEG. DEG. PSIA DEG. R BTU/
5.000 30.00 .0000 7.300 .4781+06 193.4 2047. 517.4

MACH = .0000
RNL = .5000

TEST DATA

RUN	Y	X	T/C NO	H/HREF	H/HREF	H/HREF	QREF	ODOT	HW	HW/HIT	HW/HIT	HW	DEG. R	STN NO
6	-25000	7.5500	86.000	.070	.1235	.1338	BTU/SEC	BTU/SEC	.2502	539.5	.4023-02			
6	.00000	.90000	75.000	.2339	.2698	.2923	BTU/SEC	BTU/SEC	.2500	539.1	.8792-02			
6	.00000	1.5000	76.000	.1825	.2106	.2282	BTU/SEC	BTU/SEC	.2500	539.2	.6862-02			
6	.00000	1.8750	77.000	.1916	.2211	.2395	BTU/SEC	BTU/SEC	.2500	538.9	.7203-02			
6	.00000	3.0000	78.000	.1609	.1857	.2011	BTU/SEC	BTU/SEC	.2500	538.9	.6049-02			
6	.00000	3.9000	79.000	.1603	.1850	.2004	BTU/SEC	BTU/SEC	.2502	539.5	.6026-02			
6	.00000	5.8500	80.000	.1086	.1253	.1358	BTU/SEC	BTU/SEC	.2501	539.3	.4083-02			
6	.00000	6.3000	84.000	.9103-01	.1050	.1138	BTU/SEC	BTU/SEC	.2503	539.7	.3122-02			
6	.00000	6.9000	85.000	.9391-01	.1084	.1174	BTU/SEC	BTU/SEC	.2502	539.6	.3530-02			
6	.00000	7.5500	87.000	.1245	.1436	.1556	BTU/SEC	BTU/SEC	.2502	539.6	.4679-02			
6	.25000	7.5500	88.000	.1377	.1589	.1721	BTU/SEC	BTU/SEC	.2502	539.4	.5175-02			

DATE 28 MAR 79

AMES OH58 HEATING AND PRESSURE DATA

PAGE 65
(R2XB03)

FLAT PLATE

0158 ELEVON/ELEVON-HEATING

FLAT PLATE

ALPHA = 30.00 BETA = .0000 MACH = 7.300 LENGTH = 7.800

ELEVON = -10.00 RN/L = .5000

PARAMETRIC DATA

TEST CONDITIONS***

MACH PT T₁
RN/FT /FT DEG. R BTU/
DEG. PSIA LBH

11 30.00 .0000 7.300 .5490+06 203.0 1947. 489.8 .3510-01 175.1 .1682-04 4734. .4000-01

RUN ALPHA DEG. BETA DEG. MACH PT T₁
NUMBER DEG. DEG. RN/FT /FT DEG. R BTU/
RUN PHI DEG. SPHERE TH=540 DEG. PSIA LBH

11 .0000 HS .7852-01

TEST DATA***

RUN NUMBER	Y	X	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/FT ² SEC	QDOT BTU/FT ² SEC	H/H _{HT}	H/H _{HT}	TH DEG. R	STN NO R=0.9
11	-25000	7.5500	86.000	.1021	.1184	.1285	.28.08	.2.868	.2696	.2696	.550.3	.3625-02
11	.00000	.90000	75.000	.2231	.2585	.2807	.28.09	.6.266	.2693	.2693	.549.8	.7916-02
11	.00000	1.5000	76.000	.1727	.2001	.2173	.28.10	.4.853	.2691	.2691	.549.3	.6129-02
11	.00000	1.8750	77.000	.1651	.2145	.2330	.28.09	.5.201	.2692	.2692	.549.5	.6570-02
11	.00000	3.0000	78.000	.1560	.1807	.1962	.28.10	.4.382	.2691	.2691	.549.3	.5534-02
11	.00000	3.9000	79.000	.1552	.1798	.1953	.28.08	.4.358	.2694	.2694	.549.9	.5507-02
11	.00000	5.8500	80.000	.1043	.1208	.1312	.28.09	.2.929	.2694	.2694	.549.8	.3701-02
11	.00000	6.3000	84.000	.8765-01	.1016	.1103	.28.07	.2.461	.2697	.2697	.550.4	.3111-02
11	.00000	6.9000	85.000	.9029-01	.1046	.1136	.28.08	.2.535	.2696	.2696	.550.3	.3204-02
11	.00000	7.5500	87.000	.1156	.1339	.1454	.28.07	.3.244	.2696	.2696	.550.4	.4101-02
11	.25000	7.5500	88.000	.1286	.1490	.1619	.28.08	.3.612	.2696	.2696	.550.3	.4565-02

DATE 28 MAR 79

AMES OH58 HEATING AND PRESSURE DATA

OH58 ELEVON/ELEVON-HEATING

FLAT PLATE

PAGE 66

(R2X004)

FLAT PLATE

	ALPHA ELEVON	=	30.00 .0000	BETA RNL	=	0000 .7500	MACH	=	7.300	LENGTH	=	7.809
--	-----------------	---	----------------	-------------	---	---------------	------	---	-------	--------	---	-------

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	MACH	PN/FT /FT	PT PSIA	TT DEG. R	HT BTU/ LBH	PINF PSIA	INF DEG. R	RHO SLUGS/ FT ³	VINF FT/SEC	SCALE
2	30.00	.0000	.8205+06	292.6	1908.	479.1	.5079-01	171.3	.2488-04	.4683.	.4000-01

RUN NUMBER	PHI DEG.	HS SPHERE TH=540 .9427-01
2	.0000	

TEST DATA

RUN NUMBER	Y	X	T/C NO	H/HREF R=1.0	H/HREF R=0.9	QREF BTU/ FT ² SEC	QDT BTU/ FT ² SEC	HW/HT	TW DEG. R	STN NO R=0.9	
2	- .25000	7.5500	86.000	.9935-01	.1152	.1252	.32.78	.257	.2739	547.0	.2897-02
2	.00000	.90000	75.000	.2324	.2697	.2932	.32.65	.5.588	.2767	552.5	.6778-02
2	.00000	1.5000	76.000	.1827	.2120	.2305	.32.68	.5.972	.2761	551.2	.5329-02
2	.00000	1.8750	77.000	.1598	.1854	.2015	.32.70	.5.226	.2756	550.4	.4660-02
2	.00000	3.0000	78.000	.00000	.00000	.00000	.0000	.0000	.0000	.0000	.0000
2	.00000	3.9000	79.000	.1257	.1458	.1584	.32.79	.4.123	.2737	546.6	.3665-02
2	.00000	5.8500	80.000	.9858-01	.1143	.1243	.32.79	.3.232	.2739	546.9	.2874-02
2	.00000	6.3000	84.000	.8351-01	.9684-01	.1052	.32.81	.2.740	.2734	545.9	.2435-02
2	.00000	6.9000	85.000	.8720-01	.1011	.1099	.32.79	.2.860	.2738	546.7	.2542-02
2	.00000	7.5500	87.000	.1215	.1410	.1532	.32.78	.3.984	.2740	547.0	.3544-02
2	.25000	7.5500	88.000	.1545	.1792	.1948	.32.79	.5.068	.2738	546.7	.4506-02

DATE 28 MAR 79

AMES 0H58 HEATING AND PRESSURE DATA

0H58 ELEVON/ELEVON-HEATING

PAGE 67
(R2XBB05)

FLAT PLATE

FLAT PLATE			PARAMETRIC DATA		
	ALPHA DEG.	MACH	ELEVON DEG.	BETA R/L	MACH
9	30.00	.0000	5.0000	.0000	.7500
					LENGTH = 7.800

TEST CONDITIONS

RUN	ALPHA DEG.	MACH	R/V _{FT} /FT	P _T PSIA	T _T DEG. R	HT BTU/ LBH	P _{INF} PSIA	T _{INF} DEG. R	RHO SLUGS/ FT ³	V _{INF} FT/SEC	SCALE
9	30.00	.0000	.7756+06	296.6	1984.	499.9	.5110-01	178.7	.2399-04	4.783.	.4000-01

RUN NUMBER	PHI DEG.	H _S SPHERE TH-54-0 .9491-01
9	.0000	

TEST DATA

RUN NUMBER	Y	X	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	GREF BTU/ FT2SEC	000T BTU/ FT2SEC	H/H _{HT}	T _H DEG. R	STN NO R=0.9
9	-25000	7.5600	86.000	.1061	.1228	.1333	34.86	34.86	.2649	561.9	.3156-02
9	.000000	.900000	75.000	.2272	.2629	.2854	34.88	7.922	.2646	551.3	.6754-02
9	.000000	1.50000	76.000	.1774	.2054	.2229	34.86	6.186	.2648	561.7	.5276-02
9	.000000	1.87500	77.000	.1901	.2200	.2387	34.88	6.630	.2644	550.9	.5651-02
9	.000000	3.00000	78.000	.1645	.1904	.2066	34.88	5.737	.2646	561.3	.4891-02
9	.000000	3.90000	79.000	.1656	.1917	.2080	34.86	5.772	.2649	552.0	.4924-02
9	.000000	5.85000	80.000	.1082	.1253	.1360	34.87	3.774	.2648	561.7	.3218-02
9	.000000	6.30000	84.000	.9050-01	.1052	.1142	34.85	3.167	.2652	552.5	.2703-02
9	.000000	6.90000	85.000	.9383-01	.1086	.1179	34.85	3.270	.2650	552.2	.2750-02
9	.000000	7.55000	87.000	.1321	.1529	.1660	34.85	4.665	.2650	552.2	.3929-02
9	.25000	7.5500	88.000	.1513	.1751	.1901	34.85	5.272	.2650	552.2	.4498-02

DATE 28 MAR 79

AMES OH58 HEATING AND PRESSURE DATA

OH58 ELEVON/ELEVON-HEATING

FLAT PLATE

FLAT PLATE

ALPHA = 30.00
ELEVON = -10.00

BETA = 0000
RVAL = .7500

LENGTH = 7.800

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	RN/FT /FT	PT PSIA	TT DEG. R	HT BTU/LBH	PINF PSIA	TINF DEG. R	RHO SLUGS/FT ³	VINF FT/SEC	SCALE
12	30.00	.0000	7.300	.7599+06	287.9	1974.	497.1	.4965-01	177.7	.2344-04	4770.	.4000-01

RUN PHI HS SPHERE
NUMBER DEG. TW=54.0
.9351-01

TEST DATA

RUN NUMBER	Y	X	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/FT ² SEC	Q001 BTU/FT ² SEC	HW/HF	HW/HF	TH DEG. R	STN NO R=0.9
12	-.25000	7.5500	86.000	.1031	.1194	.1296	34.15	3.522	.2651	.549.2	.3101-02	
12	.00000	.90000	.2236	.2588	.2809	.34.16	7.638	.2649	.548.7	.6724-02		
12	.00000	1.5000	.76.000	.1706	.1972	.2140	34.37	5.862	.2605	.539.8	.5126-02	
12	.00000	1.8750	.77.000	.1880	.2176	.2362	34.18	6.425	.2645	.5653-02		
12	.00000	3.0000	.78.000	.1620	.1875	.2035	34.18	5.537	.2644	.547.9	.4871-12	
12	.00000	3.9000	.79.000	.1632	.1888	.2050	34.16	5.574	.2648	.548.6	.4906-02	
12	.00000	5.9500	.80.000	.1070	.1238	.1344	34.16	3.653	.2648	.548.7	.3216-02	
12	.00000	6.3000	.84.000	.9049-01	.1047	.1137	34.15	3.090	.2651	.549.2	.2721-02	
12	.00000	6.9000	.85.000	.9277-01	.1074	.1166	34.15	3.168	.2651	.549.3	.2790-02	
12	.00000	7.5500	.87.000	.1232	.1426	.1548	34.14	4.206	.2652	.549.4	.3704-02	
12	.25000	.75500	.88.000	.1402	.1623	.1761	34.14	4.786	.2652	.549.5	.4216-02	

DATE 28 MAR 79

AMES 0H58 HEATING AND PRESSURE DATA

0H58 ELEVON/ELEVON-HEATING

PAGE 69

(R2XB07)

FLAT PLATE

FLAT PLATE

	ALPHA DEG.	MACH	RN/FT /FT	PT PSIA	TT DEG. R	HT BTU/ LBM	PINF PSIA	TINF DEG. R	MACH	LENGTH = 7.800
	ELEVON = .0000	RNL							7.300	
4	30.00	.0000	7.300	.9554+06	388.2	2052.	518.8	.6643-01	185.5	.3006-04
	RUN NUMBER	PHI DEG.								4873.
										.4000-01

PARAMETRIC DATA

	ALPHA = 30.00	BETA RN/L = .0000	VINF FT/SEC	RHO SLUGS/ FT ³	VINF FT/SEC	SCALE
		1.000				

TEST CONDITIONS

	RN/FT /FT	PT PSIA	TT DEG. R	HT BTU/ LBM	PINF PSIA	TINF DEG. R	MACH	LENGTH = 7.800

	HS SPHERE TH=540	HS SPHERE TH=540

	RN/L = .0000	VINF FT/SEC	RHO SLUGS/ FT ³	VINF FT/SEC	SCALE

TEST DATA

	H/HREF R=1.0	H/HREF R=0.9	QREF BTU/ FT ² SEC	QDOT BTU/ FT ² SEC	H/H _{HT} DEG. R	TH DEG. R	STN NO R=0.9			
4	- .25000	7.5500	.86.000	.1033	.1194	.1294	.318	.2572	556.0	.2748-02
	.00000	.90000	.75.000	.2246	.2596	.2815	.395	.2569	555.3	.5976-02
	.00000	1.5000	.76.000	.1743	.2014	.2183	.82	.2568	555.3	.4636-02
	.00000	1.8750	.77.000	.1544	.1784	.1935	.84	.2566	554.8	.4108-02
	.00000	3.0000	.78.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
	.00000	3.9000	.79.000	.1222	.1412	.1531	.91.81	.2571	555.9	.3251-02
	.00000	5.8500	.80.000	.1103	.1274	.1381	.81	.2571	555.9	.2933-02
	.00000	6.3000	.81.000	.1084	.1252	.1358	.79	.2574	556.5	.2893-02
	.00000	6.9000	.85.000	.1309	.1513	.1641	.79	.2574	556.4	.3483-02
	.00000	7.5500	.87.000	.1832	.2117	.2295	.79	.2573	556.4	.4873-02
	.25000	7.5500	.88.000	.2633	.3043	.3299	.79	.2573	556.4	.7005-02

DATE 28 MAR 79

AMES 0458 HEATING AND PRESSURE DATA
OH58 ELEVON/ELEVON-HEATING

FLAT PLATE

FLAT PLATE

ALPHA = 30.00 BETA = 0.000 LENGTH = 7.800
ELEVON = 5.000 RNL = 1.000

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	RN/FT /FT	PT PSIA	TT DEG. R	HT BTU/LBM	PINF PSIA	TINF DEG. R	RHO SLUGS/FT ³	VINF FT/SEC	SCALE
10	30.00	.0000	7.300	.9634+06	394.9	2062.	521.5	.6751-01	186.4	.3038-04	4886.	.4000-01

RUN NUMBER PHI HS SPHERE TW-540 .1095

TEST DATA

RUN NUMBER	Y	X	T/C NO	H/HREF R=1.0	H/HREF R=0.9	QREF BTU/FT ² SEC	QDOT BTU/FT ² SEC	H/HFT	TH DEG. R	STN NO R=0.9
10	-.25000	7.5500	86.000	.1098	.1269	.1377	.42.36	.2574	559.5	.2908-02
10	.00000	.90000	75.000	.2310	.2670	.2895	.42.38	.2571	558.7	.6114-02
10	.00000	1.5000	76.000	.1827	.2111	.2289	.42.39	7.746	558.5	.4836-02
10	.00000	1.8750	77.000	.1953	.2256	.2446	.42.40	.279	558.2	.5168-02
10	.00000	3.0000	78.000	.1734	.2004	.2173	.42.39	7.351	558.5	.4590-02
10	.00000	3.9000	79.000	.1770	.2045	.2218	.42.36	.2575	559.5	.4685-02
10	.00000	5.8500	80.000	.1138	.1316	.1427	.42.35	.2575	559.7	.3013-02
10	.00000	6.3000	84.000	.9565-01	.1105	.1199	.42.34	.050	560.1	.2532-02
10	.00000	6.9000	85.000	.9893-01	.1143	.1240	.42.35	.190	559.9	.2619-02
10	.00000	7.5500	87.000	.1431	.1654	.1794	.42.35	.062	559.9	.3189-02
10	.25000	7.5500	88.000	.1696	.1960	.2126	.42.35	.184	559.6	.4490-02

DATE 28 MAR 79

AMES OH58 HEATING AND PRESSURE DATA

OH58 ELEVON/ELEVON-HEATING

FLAT PLATE

PAGE 71
(R2XB09)ALPHA = 30.00
ELEVON = -10.00
RN/L = 1.000
PARAMETRIC DATA***TEST CONDITIONS***
RUN ALPHA MACH RN/FT PT DEG. R HT BTU/PSIA LBH
NUMBER DEG. .0000 7.300 .1046+07 384.4 1941 .488.1 .6651+01 174.5
RUN PHI HS SPHERE TW=540
NUMBER DEG. .0000 .1081

TEST DATA

RUN NUMBER	Y	X	T/C NO	H/HREF R=1.0	H/HREF R=0.9	QREF BTU/FT2SEC	QDOT BTU/FT2SEC	HW/HWT	TW DEG. R	STN NO R=0.9
13	-250000	7.5500	86.000	.1059	.1228	.1334	.056	.2734	556.2	.2726-02
13	.00000	.90000	75.000	.2234	.2590	.2815	.30	.2736	556.7	.5751-02
13	.00000	1.5000	76.000	.1683	.1950	.2119	.29	.457	563.3	.4331-02
13	.00000	1.8750	77.000	.1911	.2216	.2408	.38	.2732	555.7	.4919-02
13	.00000	3.0000	78.000	.1685	.1954	.2123	.39	.32	555.5	.4337-02
13	.00000	3.9000	79.000	.1725	.2000	.2173	.39	.31	555.8	.4440-02
13	.00000	5.8500	80.000	.1108	.1285	.1396	.39	.31	555.7	.2853-02
13	.00000	6.3000	81.000	.9441+01	.1095	.1190	.38	.30	556.2	.2431-02
13	.00000	6.9000	85.000	.9836+01	.1141	.1239	.38	.30	556.2	.2532-02
13	.00000	7.5500	87.000	.1426	.1653	.1796	.38	.29	556.4	.3670-02
13	.25000	7.5500	88.000	.1642	.1904	.2069	.38	.30	556.2	.4227-02

DATE 28 MAR 79

AMES OH58 HEATING AND PRESSURE DATA

PAGE 72
(REXB10)

OH58 ELEVON/ELEVON-HEATING

FLAT PLATE

FLAT PLATE

ALPHA = 40.00
ELEVON = .0000
MACH = .3000
RNL = .5000

PARAMETRIC DATA

BETA = .0000
RNL = .5000
MACH = 7.300
LENGTH = 6.000

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	RN/FT /FT	PT PSIA	TT DEG. R	HT BTU/LBH	PINF PSIA	TINF DEG. R	RHO SLUGS/FT ³	VINF FT/SEC	SCALE
17	40.00	.0000	7.300	.5126+06	200.2	2008.	506.5	.3442-01	181.1	.1595-04	4815.	.4000-01

RUN NUMBER PHI DEG.
HS SPHERE
TW=540
17 .0000 .7798-01

TEST DATA

RUN NUMBER	Y	X	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QDOT BTU/FT ² SEC	HM/HT	TM DEG. R	STN NO R=0.9	
17	-250000	5.7500	86.000	.1640	.1895	.2056	.29.23	7.425	.2597	547.8	.5980-02
17	.00000	.90000	75.000	.2540	.2937	.3186	.29.23	.2597	.2597	548.2	.9266-02
17	.00000	1.5000	76.000	.1990	.2301	.2496	.29.22	5.815	.2599	548.7	.7260-02
17	.00000	1.8750	77.000	.2271	.2626	.2848	.29.24	6.641	.2594	547.5	.8284-02
17	.00000	3.0000	78.000	.9366-02	.1082-01	.1173-01	.29.40	.2754	.2556	539.6	.3415-03
17	.00000	4.5000	84.000	.2726	.3152	.3419	.29.23	7.970	.2596	547.9	.9945-02
17	.00000	5.1000	85.000	.1544	.1786	.1937	.29.23	4.514	.2596	548.0	.5633-02
17	.00000	5.7500	87.000	.2070	.2393	.2596	.29.23	6.051	.2596	548.1	.7551-02
17	.25000	5.7500	88.000	.2202	.2546	.2761	.29.23	6.435	.2597	548.2	.8032-02

DATE 28 MAR 79

AMES OH5B HEATING AND PRESSURE DATA

OH5B ELEVON/ELEVON+HEATING

PAGE 73

IRX8111

FLAT PLATE

FLAT PLATE

	ALPHA DEG.	BETA DEG.	MACH	RN/FT	PT PSIA	T _I DEG. R	HT BTU/LBM	BETA RN/L	.0000	MACH	7.300	LENGTH = 6.000
	40.00	5.000							.5000			

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	RN/FT	PT PSIA	T _I DEG. R	HT BTU/LBM	P _{INF} PSIA	T _{INF} DEG. R	RHO SLUGS/FT ³	V _{INF} FT/SEC	SCALE
20	40.00	.0000	7.300	.5323+06	197.5	1951.	490.9	.3414-01	175.5	.1633-04	.4740.	.4000-01

RUN NUMBER	PHI DEG.	HS SPHERE TH=540	x	T/C NO	H/HREF R=1.0	H/HREF R=0.9	GREF R=0.85	QDOT BTU/FT ² SEC	H/H _T	H/H _T	TH DEG. R	STN NO R=0.9
20	.0000	.7746-01										

TEST DATA

RUN NUMBER	Y	x	T/C NO	H/HREF R=1.0	H/HREF R=0.9	GREF R=0.85	QDOT BTU/FT ² SEC	H/H _T	H/H _T	TH DEG. R	STN NO R=0.9
20	-.25000	5.7500	96.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
20	.00000	.90000	75.000	.2622	.3034	.3294	.27.96	.7.331	.2646	.541.3	.9440-02
20	.00000	1.5000	76.000	.2075	.2402	.2607	.27.95	5.801	.2648	541.7	.7471-02
20	.00000	1.8750	77.000	.2348	.2717	.2949	.27.97	6.567	.2644	540.9	.8453-02
20	.00000	3.0000	78.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
20	.00000	4.5000	84.000	.2758	.3192	.3465	.27.96	7.712	.2646	.541.4	.9931-02
20	.00000	5.1000	85.000	.1610	.1863	.2023	.27.96	4.502	.2646	.541.3	.5797-02
20	.00000	5.7500	87.000	.5388-02	.6234-02	.6764-02	.28.04	1.511	.2628	537.6	.1939-03
20	.25000	5.7500	88.000	.2363	.2735	.2969	.27.96	6.608	.2646	.541.3	.8509-02

DATE 28 MAR 79

AMES 0H58 HEATING AND PRESSURE DATA

0H58 ELEVON/ELEVON-HEATING

PAGE 74

(R2XB12)

FLAT PLATE

ALPHA = 40.00 BETA = .0000 LENGTH = 6.000
 ELEVON = -10.00 RNL = .5000

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	RN/FT /FT	PT PSIA	TT DEG. R	HT BTU LBM	PINF PSIA	TINF DEG. R	RHO SLUGS/ FT ³	VINF FT/SEC	SCALE
14	40.00	.0000	7.300	.5445+06	203.8	1960.	493.4	.3519-01	176.4	.1674-04	4752.	.4000-01

RUN NUMBER PHI DEG.
14 .0000 HS SPHERE TH=540
.7867-01

TEST DATA

RUN NUMBER	Y	X	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT ² SEC	QDOT BTU/ FT ² SEC	HW/HT	HW DEG. R	STN NO R=0.9
14	-.25000	5.7500	86.000	.1632	.1688	.2049	28.61	4.668	.2630	540.8	.5803-02
14	.00000	.90000	75.000	.2523	.2920	.3168	28.60	7.218	.2631	541.1	.8973-02
14	.00000	1.50000	76.000	.1966	.2275	.2469	28.61	5.625	.2630	540.8	.6992-02
14	.00000	1.87500	77.000	.2243	.2595	.2816	28.62	6.420	.2628	540.4	.7977-02
14	.00000	3.00000	78.000	.1874	.2168	.2353	28.62	5.364	.2627	540.1	.6664-02
14	.00000	4.50000	84.000	.2645	.3061	.3321	28.61	7.569	.2629	540.7	.9407-02
14	.00000	5.10000	85.000	.1515	.1753	.1903	28.61	4.336	.2630	540.8	.5389-02
14	.00000	5.75000	87.000	.2068	.2393	.2597	28.61	5.916	.2630	540.9	.7355-02
14	.25000	5.75000	88.000	.2247	.2600	.2822	28.61	6.429	.2630	540.9	.7992-02

DATE 28 MAR 79

AMES OH58 HEATING AND PRESSURE DATA
OH58 ELEVON/ELEVON-HEATINGPAGE 75
(R2XB13)

FLAT PLATE

FLAT PLATE

PARAMETRIC DATA

ALPHA	=	40.00
ELEVON	=	-10.00
RNL	=	.7500

BETA = .0000 MACH = 7.300 LENGTH = 6.000

TEST CONDITIONS

MACH	RM/FT	PT /FT	T _T DEG. R	HT BTU/ LBM	P _{INF} PSIA	T _{INF} DEG. R	RHO SLUGS/ FT ³	V _{INF} FT/SEC	SCALE
				504.1	.5102-01	180.2	.2376-04	4803.	.4000-01

RUN NUMBER	PHI DEG.	HS SPHERE	TW=540
15	.0000		

TEST DATA

RUN NUMBER	Y	X	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/FT ² SEC	QDOT BTU/FT ² SEC	H/H _{HT}	TW DEG. R	STN NO R=0.9
15	-25000	5.7500	86.000	.1731	.2002	.2172	35.37	6.124	.2604	547.0	.5173-02
15	.00000	.90000	.75.000	.2584	.2988	.3242	35.37	9.140	.2604	547.1	.7722-02
15	.00000	1.50000	.76.000	.2039	.2357	.2557	35.36	7.209	.2605	547.3	.6091-02
15	.00000	1.87500	.77.000	.2325	.2689	.2917	35.39	8.229	.2601	546.4	.6948-02
15	.00000	3.00000	.78.000	.2054	.2375	.2576	35.38	7.265	.2602	546.7	.6136-02
15	.00000	4.50000	.84.000	.2962	.3425	.3716	35.36	10.47	.2606	547.5	.8851-02
15	.00000	5.00000	.85.000	.1639	.1896	.2056	35.36	5.797	.2605	547.2	.4898-02
15	.00000	5.75000	.87.000	.2369	.2740	.2972	35.36	8.379	.2605	547.3	.7080-02
15	.25000	5.7500	.88.000	.2395	.2769	.3004	35.36	8.467	.2606	547.4	.7155-02

DATE 28 MAR 79

AMES OH58 HEATING AND PRESSURE DATA

OH58 ELEVON/ELEVON-HEATING

FLAT PLATE

ALPHA = 40.00
ELEVON = .0000
RN/L = 1.000
MACH = 7.300
LENGTH = 6.000

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	RN/FT /FT	PT PSIA	TT DEG. R	HT BTU/LBM	PINF PSIA	TINF DEG. R	RHO SLUGS/FT ³	VINF FT/SEC	SCALE
18	40.00	.0000	7.300	.9797+06	389.1	2026.	511.6	.6675-01	182.9	.3063-04	4839.	.4000-01

RUN PHI HS SPHERE
NUMBER DEG. TW=540
18 .0000 1087

TEST DATA

RUN NUMBER	Y	X	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	OREF BTU/FT SEC	OOLT BTU/FT SEC	HW/HT	TW DEG. R	STN NO R=0.9
18	-25000	5.7500	86.000	.1768	.2044	.2218	.41.07	.2609	.556.3	.4657-02	
18	.00000	.90000	75.000	.2451	.2835	.3076	.41.07	.2610	.556.5	.6458-02	
18	.00000	1.5000	76.000	.1937	.2240	.2430	.41.05	.2612	.556.9	.5102-02	
18	.00000	1.8750	77.000	.2255	.2608	.2829	.41.09	.2606	.555.6	.5940-02	
18	.00000	3.0000	78.000	.00000	.00000	.00000	.00000	.00000	.0000	.0000	
18	.00000	4.5000	84.000	.3161	.3636	.3966	.41.06	.2610	.556.6	.8327-02	
18	.00000	5.1000	85.000	.1745	.2018	.2190	.41.07	.2609	.556.4	.4598-02	
18	.00000	5.7500	87.000	.2608	.3016	.3272	.41.07	.2610	.556.4	.6870-02	
18	.25000	5.7500	88.000	.2855	.3302	.3592	.41.07	.2609	.556.3	.7521-02	

DATE 28 MAR 79

AMES OH58 HEATING AND PRESSURE DATA
OH58 ELEVON/ELEVON-HEATING

PAGE 77

(R2XB15)

FLAT PLATE

FLAT PLATE

PARAMETRIC DATA

ALPHA	=	40.00	BETA	=	0.000	MACH	=	7.300	LENGTH =	6.000
ELEVON	=	5.000	RN/L	=	1.000					

TEST CONDITIONS

RUN	ALPHA DEG.	BETA DEG.	MACH	RN/FT /FT	PT PSIA	TT DEG. R	HT BTU/ LBM	PINF PSIA	TINF DEG. R	RHO SLUGS/ FT ³	VINF FT/SEC	SCALE
21	40.00	.0000	7.300	.1007+.07	388.5	1994.	502.8	.6687-.01	179.7	.3122-.04	4797.	.4000-01

RUN	PHI DEG.	HS SPHERE TH=540	1086
21	.0000		

TEST DATA

RUN NUMBER	Y	X	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT ² SEC	QDOT BTU/ FT ² SEC	H/H _{WT}	TW DEG. R	STN NO R=0.9
21	-25000	5.7500	86.000	.0000	.0000	.0000	.0000	.0000	.2646	.5545	.6633-02
21	.00000	.90000	75.000	.2544	.2944	.3195	.40.14	.10.21	.2650	.5554	.5245-02
21	.00000	1.5000	76.000	.2011	.2328	.2527	.40.11	.8.067	.2642	.5535	.6077-02
21	.00000	1.8750	77.000	.2331	.2697	.2927	.40.17	.9.361	.2653	.5536	.4839-02
21	.00000	3.0000	78.000	.1856	.2148	.2331	.40.16	.7.453	.2642	.5542	.8479-02
21	.00000	4.5000	64.000	.3251	.3763	.4084	.40.15	.13.05	.2645	.5542	.4805-02
21	.00000	5.1000	85.000	.1843	.2133	.2315	.40.15	.7.398	.2582	.5410	.2744-03
21	.00000	5.7500	87.000	.1053-.01	.1217-.01	.1320-.01	.40.51	.4.266	.2643	.5539	.7938-02
21	.25000	88.000	.3044	.3523	.3824	.40.16	.12.22				

DATE 28 MAR 79

AMES 0458 HEATING AND PRESSURE DATA

0458 ELEVON/ELEVON-HEATING

PAGE 78
(R2XB161)

FLAT PLATE

FLAT PLATE

PARAMETRIC DATA

	ALPHA = 40.00	BETA = 0.000	MACH = 7.300	LENGTH = 6.000
	ELEVON = -10.00	RN/L	1.000	

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	RN/FT /FT	PT PSIA	TT DEG. R	HT BTU/ LBM	PINF PSIA	TINF DEG. R	RHO SLUGS/ FT ³	VINF FT/SEC	SCALE
16	.40.00	.0000	7.300	.9443+06	394.1	2083.	527.3	.6724-01	188.5	.2993-04	4913.	.4,000-01
RUN NUMBER	PHI DEG.											
16	.0000											

TEST DATA

RUN NUMBER	Y	X	T/C NO	H/HREF R=1.0	H/HREF R=0.9	QREF BTU/ FT ² SEC	QDOT BTU/ FT ² SEC	H/HIT	TH DEG. R	STN NO R=0.9	
16	-.25000	5.7500	86.000	.1722	.1989	.2156	.42.94	.7.397	.2547	.559.7	.4595-02
16	.00000	.90000	75.000	.2503	.2891	.3134	.42.95	.10.75	.2546	.559.4	.6678-02
16	.00000	1.5000	76.000	.1988	.2296	.2489	.42.95	.8.539	.2547	.559.6	.5304-02
16	.00000	1.8750	77.000	.2292	.2647	.2869	.42.98	.9.849	.2542	.558.6	.6113-02
16	.00000	3.0000	78.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
16	.00000	4.5000	84.000	.3187	.3681	.3990	.42.94	.13.69	.2547	.559.7	.8502-02
16	.00000	5.1000	85.000	.1767	.2041	.2213	.42.94	.7.588	.2548	.559.9	.4715-02
16	.00000	5.7500	87.000	.2624	.3031	.3285	.42.93	.11.27	.2549	.560.1	.7000-02
16	.00000	5.7500	88.000	.2884	.3331	.3611	.42.93	.12.38	.2548	.560.0	.7695-02

DATE 28 MAR 79

AMES OH58 HEATING AND PRESSURE DATA

OH58 ELEVON/ELEVON-HEATING

FLAT PLATE

		FLAT PLATE		PARAMETRIC DATA	
		ALPHA =	40.00	BETA =	0.000
		ELEVON =	.0000	RNL =	3.000
					LENGTH = 6.000

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	MACH	RN/FT /FT	PT PSIA	TT DEG. R	HT BTU/LBM	PINF PSIA	TINF DEG. R	RHO SLUGS/FT ³	VINF FT/SEC	SCALE
19	40.00	.0000	7.300	.2801+07	1160.	2074.	524.7	.1980	.187.6	.8859-04	4901.

RUN NUMBER	PHI DEG.	HS SPHERE TH=540	1876
19	.0000		

TEST DATA

RUN NUMBER	Y	X	T/C NO	H/HREF R=1.0	H/HREF R=0.9	QREF R=0.85	QDOT BTU/FT ² SEC	H/HIT	TM DEG. R	STN NO R=0.9	
19	-.25000	5.7500	86.000	.5158	.5962	.6465	72.96	.37.63	.2581	564.4	.7999-02
19	.00000	.90000	75.000	.2326	.2688	.2915	72.97	16.97	.2579	564.1	.3607-02
19	.00000	1.50000	76.000	.1999	.2311	.2506	72.96	14.59	.2581	564.4	.3100-02
19	.00000	1.97500	77.000	.2390	.2761	.2994	73.04	17.45	.2574	562.8	.3705-02
19	.00000	3.00000	78.000	.00000	.00000	.00000	.0000	.0000	.0000	.0000	.0000
19	.00000	4.50000	84.000	.5448	.6297	.6829	.72.96	.39.75	.2581	564.4	.8449-02
19	.00000	5.10000	85.000	.4821	.5572	.6043	.72.93	.35.15	.2584	565.1	.7476-02
19	.00000	5.75000	87.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
19	.25000	5.75000	88.000	.5708	.6598	.7156	.72.91	.41.62	.2585	565.2	.6852-02

DATE 28 MAR 79

AMES OH58 HEATING AND PRESSURE DATA

OH58 FUSELAGE/ELEVON-HEATING

FLAT PLATE

FLAT PLATE		PARAMETRIC DATA	
		ALPHA = 30.00	MACH = .0000
		ELEVON = .0000	BETA RN/L = .5000
			LENGTH = 14.40

		TEST CONDITIONS***			
RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	PINF PSIA	TINF DEG. R
31	30.00	.0000	7.300	.5082+06	195.9
					1993.
					502.4

RUN NUMBER	PHI DEG.	HS SPHERE TW-510	HS SPHERE TW-510
31	.0000	.7714-01	

TEST DATA

RUN NUMBER	Y	X	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/FT2SEC	QDOT BTU/FT2SEC	H/H/T	TM DEG. R	STN NO R=0.9
31	-25000	14.150	86.000	.7159-01	.8286-01	.6994-01	28.48	2.039	.2648	554.4	.2628-02
31	.00000	.90000	75.000	.2353	.2724	.2958	28.40	6.682	.2657	558.4	.8637-02
31	.00000	1.5000	76.000	.1826	.2115	.2296	28.38	5.164	.2671	559.3	.6705-02
31	.00000	1.8750	77.000	.1605	.1859	.2018	28.42	4.562	.2663	557.6	.5895-02
31	.00000	3.0000	78.000	.1383	.1601	.1738	28.42	3.930	.2663	557.6	.5076-02
31	.00000	3.6000	81.000	.1340	.1551	.1694	28.41	3.805	.2665	558.0	.4917-02
31	.00000	7.2000	82.000	.9030-01	.1046	.1135	28.41	2.565	.2655	558.1	.3335-02
31	.00000	10.800	83.000	.7397-01	.8564-01	.9297-01	28.43	2.103	.2660	557.0	.2715-02
31	.00000	12.900	84.000	.5754-01	.6661-01	.7230-01	28.47	1.638	.2651	556.1	.2112-02
31	.00000	13.500	85.000	.5787-01	.6699-01	.7271-01	28.47	1.648	.2650	556.9	.2124-02
31	.00000	14.150	87.000	.8532-01	.9875-01	.1072	28.48	2.430	.2648	554.5	.3131-02
31	.25000	14.150	88.000	.9264-01				2.638	.2649	554.7	.3400-02

TEST DATA

RUN NUMBER	Y	X	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/FT2SEC	QDOT BTU/FT2SEC	H/H/T	TM DEG. R	STN NO R=0.9
31	-25000	14.150	86.000	.7159-01	.8286-01	.6994-01	28.48	2.039	.2648	554.4	.2628-02
31	.00000	.90000	75.000	.2353	.2724	.2958	28.40	6.682	.2657	558.4	.8637-02
31	.00000	1.5000	76.000	.1826	.2115	.2296	28.38	5.164	.2671	559.3	.6705-02
31	.00000	1.8750	77.000	.1605	.1859	.2018	28.42	4.562	.2663	557.6	.5895-02
31	.00000	3.0000	78.000	.1383	.1601	.1738	28.42	3.930	.2663	557.6	.5076-02
31	.00000	3.6000	81.000	.1340	.1551	.1694	28.41	3.805	.2665	558.0	.4917-02
31	.00000	7.2000	82.000	.9030-01	.1046	.1135	28.41	2.565	.2655	558.1	.3335-02
31	.00000	10.800	83.000	.7397-01	.8564-01	.9297-01	28.43	2.103	.2660	557.0	.2715-02
31	.00000	12.900	84.000	.5754-01	.6661-01	.7230-01	28.47	1.638	.2651	556.1	.2112-02
31	.00000	13.500	85.000	.5787-01	.6699-01	.7271-01	28.47	1.648	.2650	556.9	.2124-02
31	.00000	14.150	87.000	.8532-01	.9875-01	.1072	28.48	2.430	.2648	554.5	.3131-02
31	.25000	14.150	88.000	.9264-01				2.638	.2649	554.7	.3400-02

DATE 28 MAR 79

AMES OH58 HEATING AND PRESSURE DATA

OH58 FUSELAGE/ELEVON-HEATING

FLAT PLATE

FLAT PLATE		FLAT PLATE		PARAMETRIC DATA	
		ALPHA = 30.00	BETA = .0000	MACH = 7.300	LENGTH = 14.40
		ELEVON = 10.00	RNL = .5000		

		TEST CONDITIONS***			
RUN NUMBER	ALPHA DEG.	MACH	RN/FT /FT	PT PSIA	HT BTU LBH
30	30.00	.0000	7.300	.4946+06	192.2
					2002. 504.9
RUN NUMBER	PHI DEG.	HS SPHERE	TW=540		
30	.0000	.7640-01			

TEST DATA

RUN NUMBER	Y	X	T/C NO	H/HREF R=1.0	H/HREF R=0.9	QREF R=0.85	QDOT BTU FT2SEC	HM/HIT	TW DEG. R	STN NO R=0.9
30	-25000	14.150	86.000	.4170-01	.4826-01	.5237-01	.28.37	1.183	.2639	.555.3
30	.00000	90.000	75.000	.2336	.2703	.2934	.28.34	6.619	.2647	.6683-02
30	.00000	1.500	.75.000	.1829	.2116	.2297	.28.34	5.182	.2647	.6798-02
30	.00000	1.8750	.77.000	.1586	.1836	.1992	.28.35	4.497	.2644	.5896-02
30	.00000	3.0000	.78.000	.1379	.1596	.1732	.28.35	3.909	.2644	.5126-02
30	.00000	3.6000	.81.000	.1337	.1547	.1679	.28.33	3.787	.2648	.4969-02
30	.00000	7.2000	.82.000	.8873-01	.1027	.1115	.29.32	2.513	.2652	.3299-02
30	.00000	10.800	.83.000	.7394-01	.8558-01	.9290-01	.28.32	2.094	.2651	.2749-02
30	.00000	12.900	.84.000	.5696-01	.6592-01	.7155-01	.28.35	1.615	.2643	.2117-02
30	.00000	13.500	.85.000	.5343-01	.6183-01	.6711-01	.28.36	1.515	.2642	.1986-02
30	.00000	14.150	.86.000	.5546-01	.6418-01	.6966-01	.28.37	1.573	.2640	.2062-02
30	.25000		.88.000	.8132-01	.9410-01	.1021	.28.37	2.307	.2641	.3023-02

PAGE 81
(R2XB19)

DATE 28 MAR 79

AMES OH58 HEATING AND PRESSURE DATA

OH58 FUSELAGE/ELEVON-HEATING

PAGE 82
(R2XB201)

FLAT PLATE

FLAT PLATE

ALPHA = 30.00
ELEVON = -10.00
BETA = .0000
RN/L = .5000
MACH = 7.300
LENGTH = 14.40

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	RN/FT /FT	PT PSIA	TT DEG. R	HT BTU/ LBM	PINF PSIA	TINF DEG. R	RHO SLUGS/ FT ³	VINF FT/SEC	SCALE
33	30.00	.0000	7.300	.4884+06	190.0	2003.	505.2	.3267-01	180.6	.1518-04	4809.	.4000-01

RUN NUMBER	PHI DEG.	H _S SPHERE TH=540 .7596-01
33	.0000	

TEST DATA

RUN NUMBER	Y	X	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT ² SEC	QDOT BTU/ FT ² SEC	HW/HIT	HW DEG. R	TH DEG. R	STN NO R=0.9
33	-25000	14.150	86.000	.7192-01	.8319-01	.9026-01	28.31	2.036	.2621	551.8	.2689-02	
33	.00000	.90000	.75.000	.2316	.2681	.2909	28.23	6.538	.2640	556.0	.8664-02	
33	.00000	1.5000	.76.000	.1799	.2081	.2259	28.23	5.077	.2640	555.9	.6727-02	
33	.00000	1.8750	.77.000	.1592	.1842	.1999	28.24	4.496	.2636	555.1	.5953-02	
33	.00000	3.0000	.78.000	.1369	.1584	.1719	28.25	3.867	.2636	555.0	.5120-02	
33	.00000	3.6000	.81.000	.1336	.1545	.1677	28.23	3.771	.2639	555.6	.4995-02	
33	.00000	7.2000	.82.000	.8796-01	.1018	.1105	28.24	2.484	.2637	555.3	.3290-02	
33	.00000	10.800	.83.000	.7322-01	.8471-01	.9193-01	28.26	2.069	.2632	554.2	.2738-02	
33	.00000	12.900	.84.000	.5560-01	.6433-01	.6980-01	28.29	1.573	.2625	552.7	.2079-02	
33	.00000	13.500	.85.000	.5610-01	.6490-01	.7043-01	28.29	1.587	.2624	552.6	.2098-02	
33	.00000	14.150	.87.000	.8301-01	.9603-01	.1042	28.30	2.349	.2622	552.1	.3104-02	
33	.00000	.25000	.88.000	.8728-01	.1010	.1096	28.30	2.470	.2622	552.2	.3264-02	

DATE 28 MAR 79

AMES OH58 HEATING AND PRESSURE DATA

PAGE 83

OH58 FUSELAGE/ELEVON-HEATING

(R2XB21)

FLAT PLATE

	ALPHA	MACH	RN/FT	PT	T _I	HT	P _{INF}	T _{INF}	RHO	V _{INF}	SCALE
	DEG.		/FT	PSIA	DEG. R	BTU/LBM	PSIA	DEG. R	SLUGS/FT ³	FT/SEC	
32	30.00	.0000	7.300	.7785+06	292.5	1965.	494.6	.5049-01	176.8	.2396-04	.4758.
											.4000-01

TEST CONDITIONS

RUN NUMBER	Y	X	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	O _{REF} BTU/FT ² SEC	O _{REF} BTU/FT ² SEC	O _{REF} BTU/FT ² SEC	HH/HT DEG. R	HH/HT DEG. R	HH/HT DEG. R
32	-25000	14.150	86.000	.1708	.1978	.2148	34.17	5.838	.2667	549.9	.5081-02	
32	.00000	.90000	.75.000	.2209	.2558	.2778	34.15	7.544	.2673	550.9	.6571-02	
32	.00000	1.50000	.76.000	.1710	.1980	.2150	34.15	5.840	.2672	550.8	.5086-02	
32	.00000	1.87500	.77.000	.1483	.1718	.1865	34.17	5.068	.2668	550.0	.4412-02	
32	.00000	3.00000	.78.000	.1308	.1515	.1645	34.16	4.470	.2669	550.2	.3892-02	
32	.00000	3.60000	.81.000	.1288	.1492	.1619	34.16	4.399	.2671	550.6	.3831-02	
32	.00000	7.2000	.82.000	.1022	.1110	.1110	34.15	3.016	.2671	550.6	.2626-02	
32	.00000	10.800	.83.000	.1244	.1441	.1564	34.16	4.250	.2670	550.4	.3701-02	
32	.00000	12.900	.84.000	.1540	.1783	.1935	34.17	5.263	.2668	549.9	.4581-02	
32	.00000	13.500	.85.000	.1682	.1948	.2115	34.17	5.749	.2667	549.9	.5003-02	
32	.00000	14.150	.87.000	.2124	.2460	.2670	34.18	7.260	.2666	549.6	.6318-02	
32	.00000	.25000	.88.000	.2283	.2643	.2870	34.18	7.802	.2666	549.6	.6789-02	

PARAMETRIC DATA

	ALPHA	MACH	RN/L	BETA	0000	MACH	7.300	LENGTH	14.40
	DEG.			DEG.					

TEST DATA

RUN NUMBER	Y	X	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	O _{REF} BTU/FT ² SEC	O _{REF} BTU/FT ² SEC	O _{REF} BTU/FT ² SEC	HH/HT DEG. R	HH/HT DEG. R	HH/HT DEG. R
32	-25000	14.150	86.000	.1708	.1978	.2148	34.17	5.838	.2667	549.9	.5081-02	
32	.00000	.90000	.75.000	.2209	.2558	.2778	34.15	7.544	.2673	550.9	.6571-02	
32	.00000	1.50000	.76.000	.1710	.1980	.2150	34.15	5.840	.2672	550.8	.5086-02	
32	.00000	1.87500	.77.000	.1483	.1718	.1865	34.17	5.068	.2668	550.0	.4412-02	
32	.00000	3.00000	.78.000	.1308	.1515	.1645	34.16	4.470	.2669	550.2	.3892-02	
32	.00000	3.60000	.81.000	.1288	.1492	.1619	34.16	4.399	.2671	550.6	.3831-02	
32	.00000	7.2000	.82.000	.1022	.1110	.1110	34.15	3.016	.2671	550.6	.2626-02	
32	.00000	10.800	.83.000	.1244	.1441	.1564	34.16	4.250	.2670	550.4	.3701-02	
32	.00000	12.900	.84.000	.1540	.1783	.1935	34.17	5.263	.2668	549.9	.4581-02	
32	.00000	13.500	.85.000	.1682	.1948	.2115	34.17	5.749	.2667	549.9	.5003-02	
32	.00000	14.150	.87.000	.2124	.2460	.2670	34.18	7.260	.2666	549.6	.6318-02	
32	.00000	.25000	.88.000	.2283	.2643	.2870	34.18	7.802	.2666	549.6	.6789-02	

DATE 28 MAR 79

AMES OH-58 HEATING AND PRESSURE DATA

OH58 FUSELAGE/ELEVON-HEATING

FLAT PLATE

PAGE 84
R2XB221

FLAT PLATE

PARAMETRIC DATA

ALPHA = 30.00 BETA = 0000
 ELEVON = 10.00 R/N/L = .7500

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	R/N/FT /FT	PT PSIA	TT DEG. R	HT BTU/ LBM	PINF PSIA	TINF DEG. R	RHO SLUGS/ FT ³	VINF FT/SEC	SCALE
28	30.00	.0000	7.300	.7867+06	289.7	1943.	488.7	.5012-01	174.7	.2408-04	.4729.	.4000-01

TEST CONDITIONS

RUN NUMBER	PHI DEG.	HS SPHERE TW=540 .9381-01
28	.0000	

TEST DATA

RUN NUMBER	Y	X	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT ² SEC	QDT BTU/ FT ² SEC	HW/HT	TW DEG. R	STN NO R=0.9
28	- .25000	14.150	86.000	.1746	.2024	.2199	33.37	5.827	.2717	553.3	.5181-02
28	.00000	1.5000	75.000	.2088	.2421	.2631	33.28	6.949	.2735	556.9	.6195-02
28	.00000	1.5000	76.000	.1617	.1876	.2038	33.28	5.382	.2736	557.1	.4800-02
28	.00000	1.8750	77.000	.1392	.1614	.1753	33.30	4.634	.2731	556.1	.4129-02
28	.00000	3.0000	78.000	.1239	.1436	.1561	33.29	4.124	.2732	556.5	.3675-02
28	.00000	3.6000	81.000	.1211	.1404	.1526	33.28	4.030	.2735	557.0	.3593-02
28	.00000	7.2000	82.000	.6515-01	.9874-01	.1073	33.28	2.834	.2735	557.0	.2527-02
28	.00000	10.800	83.000	.1376	.1595	.1734	33.31	4.583	.2730	555.9	.4083-02
28	.00000	12.900	84.000	.1692	.1962	.2132	33.35	5.643	.2722	554.3	.5021-02
28	.00000	13.500	85.000	.1827	.2118	.2301	33.35	6.092	.2721	554.2	.5420-02
28	.00000	14.150	87.000	.2216	.2569	.2791	33.37	7.395	.2717	553.3	.6575-02
28	.00000	.25000	88.000	.2342	.2714	.2949	33.36	7.813	.2716	553.5	.6947-02

DATE 28 MAR 79

AMES OHSB HEATING AND PRESSURE DATA

0H5B FUSelage/ELEVon-HEATING

FLAT PLATE

FLAT PLATE			FLAT PLATE		
	ALPHA DEG.	BETA DEG.	ALPHA DEG.	BETA DEG.	ALPHA DEG.
34	30.00	.0000	30.00	-10.00	30.00
			RN/L	RN/L	RN/L
			.7500	.7500	.7500
					MACH = 14.40

PARAMETRIC DATA

RUN NUMBER	ALPHA DEG.	MACH	RN/FT /FT	PT PSIA	T _T DEG. R	HT BTU/ LBM	P _{INF} PSIA	T _{INF} DEG. R	RHO FT ³	VINF FT/SEC	SCALE	
34	30.00	.0000	7.300	.7970+06	293.4	1942.	.488.5	.5075-01	174.6	.2439-04	4728.	.4000-01

TEST CONDITIONS

RUN NUMBER	PHI DEG.	HS SPHERE TH=540 .9440-01
34	.0000	

TEST DATA

RUN NUMBER	Y	X	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT ² SEC	QDOT BTU/ FT ² SEC	H/H HT	TW DEG. R	STN NO R=0.9
34	-25000	14.150	86.000	.2287	.2651	.2880	33.57	7.677	.2715	552.8	.6740-02
34	.00000	.90000	75.000	.2176	.2523	.2742	33.49	7.287	.2732	556.2	.6415-02
34	.00000	1.5000	76.000	.1679	.1947	.2115	33.49	5.622	.2733	556.3	.4950-02
34	.00000	1.8750	77.000	.1458	.1691	.1837	33.51	4.887	.2728	555.3	.4299-02
34	.00000	3.0000	78.000	.1292	.1498	.1628	33.50	4.330	.2730	555.7	.3810-02
34	.00000	3.6000	81.000	.1276	.1480	.1608	33.49	4.275	.2732	556.3	.3763-02
34	.00000	7.2000	82.000	.9133-01	.1059	.1151	33.49	3.059	.2732	556.2	.2693-02
34	.00000	10.800	83.000	.1528	.1771	.1925	33.52	5.121	.2727	555.1	.4504-02
34	.00000	12.900	84.000	.1930	.2237	.2430	33.56	6.475	.2719	553.5	.5688-02
34	.00000	13.500	85.000	.2120	.2457	.2670	33.56	7.115	.2718	553.2	.6249-02
34	.00000	14.150	87.000	.2549	.2954	.3210	33.58	8.559	.2714	552.5	.7513-02
34	.25000	14.150	88.000	.2571	.2980	.3237	33.57	8.631	.2715	552.3	.7578-02

DATE 28 MAR 79

AMES 0H58 HEATING AND PRESSURE DATA

0H58 FUSELAGE/ELEVON-HEATING

PAGE 86

FLAT PLATE

FLAT PLATE		FLAT PLATE		PARAMETRIC DATA	
		ALPHA = 30.00	BETA = .0000	MACH = .0000	LENGTH = 7.300
		ELEVON = .0000	R/N/L		
				.7500	

TEST CONDITIONS									
RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	RN/FT /FT	PT PSIA	TT DEG. R	HT BTU/ LBH	PINF PSIA	TINF DEG. R
24	30.00	.0000	7.300	.7711+06	289.3	1963.	494.2	.4995-01	176.7
RUN NUMBER	PHI DEG.		HS SPHERE TW=540 .9374-01						
24	.0000								

TEST DATA

RUN NUMBER	Y	X	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HW/HWT	HW/HWT	STN NO R=0.9	
24	-25000	14.150	86.000	.1099	.127	.1382	33.87	3.721	.2684	.552	.9	.3284-02
24	.00000	.90000	.2180	.2526	.2744	.2744	33.82	7.373	.2695	.555	.1	.6519-02
24	.00000	1.5000	.1700	.1970	.2140	.2140	33.82	5.751	.2695	.555	.1	.5084-02
24	.00000	1.8750	.77.000	.1485	.1720	.1868	33.84	5.024	.2691	.554	.3	.4439-02
24	.00000	3.0000	.78.000	.1319	.1529	.1660	33.82	4.462	.2695	.555	.0	.3945-02
24	.00000	3.6000	.81.000	.1330	.1541	.1674	33.81	4.497	.2697	.555	.5	.3977-02
24	.00000	7.2000	.82.000	.85668-01	.9928-01	.1078	33.80	2.896	.2698	.555	.7	.2562-02
24	.00000	10.800	.83.000	.9205-01	.1067	.1158	33.82	3.113	.2695	.555	.1	.2752-02
24	.00000	12.900	.84.000	.1260	.1460	.1585	33.86	4.267	.2697	.553	.5	.3767-02
24	.00000	13.500	.85.000	.1139	.1319	.1432	33.86	3.856	.2686	.553	.2	.3404-02
24	.00000	14.150	.87.000	.1519	.1760	.1911	33.87	5.146	.2684	.552	.8	.4541-02
24	.25000	14.150	.88.000	.1744	.2020	.2193	33.87	5.906	.2684	.552	.9	.5212-02

DATE 28 MAR 79

AMES OH58 HEATING AND PRESSURE DATA

PAGE 87

(R2X825)

OH58 FUSELAGE/ELEVON-HEATING

FLAT PLATE

FLAT PLATE			FLAT PLATE			PARAMETRIC DATA		
	ALPHA = 30.00	BETA = .0000		MACH = 7.300	LENGTH = 14.40			
	ELEVON = 10.00	RNL = .7500						

TEST CONDITIONS...												
RUN NUMBER	ALPHA DEG.	MACH	RN/FT	PT PSIA	TT DEG. R	HT BTU/LBM	PINF PSIA	TINF DEG. R	RHO SLUGS/FT ³	VINF FT/SEC	SCALE	
26	30.00	.0000	7.300	.7608+06	288.6	1975.	497.5	.4977-01	177.9	.2348-04	.4772.	.4000-01

RUN NUMBER	PHI DEG.	HS SPHERE TH=54.0	HS SPHERE TH=54.0
26	.0000	.9363-01	.9363-01

TEST DATA...

RUN NUMBER	Y	X	T/C NO	H/HREF R=1.0	H/HREF R=0.9	GREF BTU/FT ² SEC	QDOT BTU/FT ² SEC	HM/HF	HM/HF	TW DEG. R	STN NO R=0.9
26	-25000	14.150	86.000	.8071-01	.9353-01	.1016	.33.95	2.740	.2706	561.1	.2427-02
26	.00000	.90000	75.000	.2257	.2617	.2843	.33.82	7.632	.2731	566.3	.6788-02
26	.00000	1.50000	76.000	.1768	.2050	.2228	.33.81	5.977	.2733	566.8	.5318-02
26	.00000	1.87500	77.000	.1814	.2103	.2285	.33.84	6.138	.2728	565.6	.5457-02
26	.00000	3.00000	78.000	.526	.7770	.1923	.33.83	5.164	.2730	566.0	.4592-02
26	.00000	3.60000	81.000	.1587	.1840	.1999	.33.82	5.366	.2731	566.2	.4773-02
26	.00000	7.20000	82.000	.9209-01	.1068	.1160	.33.84	3.116	.2727	565.5	.2770-02
26	.00000	10.800	83.000	.8865-01	.1027	.1116	.33.89	3.001	.2719	563.9	.2664-02
26	.00000	12.900	84.000	.9339-01	.1087	.1181	.33.92	3.183	.2711	562.2	.2822-02
26	.00000	13.500	85.000	.9725-01	.1127	.1224	.33.92	3.299	.2711	562.1	.2625-02
26	.00000	14.150	87.000	.1228	.1435	.1559	.33.94	4.203	.2707	561.4	.3724-02
26	.00000	14.150	88.000	.1578	.1829	.1986	.33.95	5.353	.2709	561.8	.4745-02

DATE 28 MAR 79

AMES 0458 HEATING AND PRESSURE DATA

PAGE 88

(R2XB261)

0458 FUSELAGE/ELEVON-HEATING

FLAT PLATE

FLAT PLATE		ALPHA = 30.00 ELEVON = .0000		BETA = .0000 RNL = 1.000		PARAMETRIC DATA	
RUN NUMBER	ALPHA DEG.	MACH	PN/FT /FT	PT PSIA	TT DEG. R	HT BTU/LBM	MACH = 7.300 LENGTH = 14.40
25	30.00	.0000	7.300	.1031+07	369.5	1971. 496.2	.6720-01 177.4 .3179-04 4766. .4000-01

TEST CONDITIONS

RUN NUMBER	Y	X	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	GREF BTU/FT ² SEC	000T BTU/FT ² SEC	HM/HIT	TW DEG. R	STN NO R=0.9
25	-25000	14.150	86.000	.3238	.3752	.4075	.39.36	.12.75	.2701	.558.5	.8366-02
25	.00000	.90000	.75.000	.2227	.2581	.2805	.39.26	.8.743	.2719	.562.3	.5755-02
25	.00000	.1.50000	.76.000	.1751	.2030	.2206	.39.24	.6.871	.2723	.563.1	.4525-02
25	.00000	.1.87500	.77.000	.1697	.1967	.2137	.39.29	.6.666	.2714	.561.4	.4385-02
25	.00000	.3.00000	.78.000	.1505	.1745	.1896	.39.28	.5.912	.2716	.561.8	.3890-02
25	.00000	.3.60000	.81.000	.1519	.1761	.1914	.39.26	.5.965	.2719	.562.4	.3927-02
25	.00000	.7.20000	.82.000	.1868	.2153	.2339	.39.27	.7.296	.2717	.561.8	.4801-02
25	.00000	.10.800	.83.000	.3131	.3629	.3942	.39.30	.12.31	.2711	.560.7	.809-02
25	.00000	.12.900	.84.000	.2856	.3310	.3595	.39.34	.11.24	.2704	.559.3	.7380-02
25	.00000	.13.500	.85.000	.3017	.3495	.3798	.39.35	.11.87	.2703	.559.0	.7795-02
25	.00000	.14.150	.87.000	.3895	.4147	.4178	.39.36	.12.97	.2701	.558.6	.8514-02
25	.25000	14.150	.88.000	.3319	.3846	.4178	.39.37	.13.07	.2700	.558.4	.8577-02

TEST DATA

RUN NUMBER	Y	X	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	GREF BTU/FT ² SEC	000T BTU/FT ² SEC	HM/HIT	TW DEG. R	STN NO R=0.9
25	-25000	14.150	86.000	.3238	.3752	.4075	.39.36	.12.75	.2701	.558.5	.8366-02
25	.00000	.90000	.75.000	.2227	.2581	.2805	.39.26	.8.743	.2719	.562.3	.5755-02
25	.00000	.1.50000	.76.000	.1751	.2030	.2206	.39.24	.6.871	.2723	.563.1	.4525-02
25	.00000	.1.87500	.77.000	.1697	.1967	.2137	.39.29	.6.666	.2714	.561.4	.4385-02
25	.00000	.3.00000	.78.000	.1505	.1745	.1896	.39.28	.5.912	.2716	.561.8	.3890-02
25	.00000	.3.60000	.81.000	.1519	.1761	.1914	.39.26	.5.965	.2719	.562.4	.3927-02
25	.00000	.7.20000	.82.000	.1868	.2153	.2339	.39.27	.7.296	.2717	.561.8	.4801-02
25	.00000	.10.800	.83.000	.3131	.3629	.3942	.39.30	.12.31	.2711	.560.7	.809-02
25	.00000	.12.900	.84.000	.2856	.3310	.3595	.39.34	.11.24	.2704	.559.3	.7380-02
25	.00000	.13.500	.85.000	.3017	.3495	.3798	.39.35	.11.87	.2703	.559.0	.7795-02
25	.00000	.14.150	.87.000	.3895	.4147	.4178	.39.36	.12.97	.2701	.558.6	.8514-02
25	.25000	14.150	.88.000	.3319	.3846	.4178	.39.37	.13.07	.2700	.558.4	.8577-02

DATE 28 MAR 79

AMES OH58 HEATING AND PRESSURE DATA

0H58 FUSELAGE/ELEVON+HEATING FLAT PLATE

FLAT PLATE

FLAT PLATE

	ALPHA = 30.00	BETA = 0.000	PARAMETRIC DATA
	ELEVON = 10.00	RN/L = 1.000	MACH = 7.300
			LENGTH = 14.40

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	MACH	RN/FT /FT	PT PSIA	TT DEG. R	HT BTU/ LB ⁴	PINF PSIA	TINF DEG. R	RHO SLUGS/ FT ³	VINF FT/SEC	SCALE
29	30.00	.0000	7.300	.9799+06	393.6	2039.	.6744-01	164.2	.3073-04	4856.	.4000-01

RUN NUMBER	PHI DEG.	HS SPHERE TH-540	X .1093
29	.0000		

TEST DATA

RUN NUMBER	Y	X	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	GREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	HM/HT	HM/HT	TM DEG. R	STN NO R=0.9
29	-25000	14.150	86.000	.3328	.3846	.4170	.41.78	.13.90	.2577	.553.2	.8752-02	
29	.00000	.90000	.75.000	.2540	.2809	.41.72	.9.346	.2586	.556.3	.5893-02		
29	.00000	1.50000	.76.000	.1735	.2006	.2176	.41.73	.7.242	.2585	.554.9	.4565-02	
29	.00000	1.87500	.77.000	.1485	.1716	.1861	.41.74	.6.198	.2583	.554.5	.3905-02	
29	.00000	3.00000	.78.000	.1347	.1558	.1689	.41.73	.5.622	.2585	.555.0	.3544-02	
29	.00000	3.60000	.81.000	.1341	.1550	.1681	.41.70	.5.590	.2589	.555.9	.3536-02	
29	.00000	7.2000	.82.000	.2116	.2446	.2653	.41.68	.8.819	.2592	.556.5	.5565-02	
29	.00000	10.800	.83.000	.3222	.3724	.4039	.41.70	.13.43	.2589	.559.9	.8474-02	
29	.00000	12.900	.84.000	.3033	.3506	.3802	.41.75	.12.66	.2582	.554.2	.7978-02	
29	.00000	13.500	.85.000	.3057	.3534	.3832	.41.76	.12.77	.2580	.553.9	.8041-02	
29	.00000	14.150	.87.000	.3338	.3858	.4183	.41.77	.13.94	.2578	.553.4	.8779-02	
29	.00000	.25000	.88.000	.3346	.3887	.4193	.41.77	.13.97	.2578	.553.6	.8799-02	

PAGE 89
(R2XB27)

DATE 28 MAR 79

AMES 0H58 HEATING AND PRESSURE DATA

0H58 FUSELAGE/ELEVON-HEATING

FLAT PLATE

PAGE 90

(R2XB28)

FLAT PLATE

	ALPHA DEG.	MACH	RN/FT /FT	PT PSIA	TT DEG. R	HT BTU/ LBH	BETA RN/L	.0000	MACH	7.300	LENGTH	14.40
	30.00	.0000	7.300	.9764+06	391.2	2036.	514.4	.6706-01	183.9	.3060-04	4852.	.4000-01

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	RN/FT /FT	PT PSIA	TT DEG. R	HT BTU/LBH	PINF PSIA	TINF DEG. R	RHO SLUGS/ FT ³	VINF FT/SEC	SCALE
35	30.00	.0000	.0000	.9764+06	391.2	2036.	514.4	.6706-01	183.9	.3060-04	4852.	.4000-01

RUN NUMBER	PHI DEG.	H5 SPHERE TW=54.0	.1090
35	.0000		

TEST DATA

RUN NUMBER	Y	X	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	OREF BTU/ FT ² SEC	OOT BTU/ FT ² SEC	H/HIT	TH DEG. R	STN NO R=0.9
35	-25000	14.150	86.000	.3241	.3747	.4064	41.49	13.45	.2595	556.3	.8543-02
35	.00000	.90000	.75.000	.2217	.2564	.2781	41.44	9.88	.2603	558.0	.5845-02
35	.00000	1.50000	.76.000	.1743	.2015	.2166	41.43	7.221	.2604	558.3	.4594-02
35	.00000	1.87500	.77.000	.1477	.1708	.1853	41.46	6.126	.2599	557.2	.3894-02
35	.00000	3.00000	.78.000	.3337	.1945	.1676	41.45	5.510	.2601	557.7	.3523-02
35	.00000	3.60000	.81.000	.1321	.1528	.1657	41.42	5.471	.2607	558.8	.3192-02
35	.00000	7.20000	.82.000	.1997	.2310	.2506	41.40	8.270	.2609	559.3	.5266-02
35	.00000	10.8000	.83.000	.3156	.3619	.3959	41.42	13.07	.2606	558.7	.8319-02
35	.00000	12.9000	.84.000	.2979	.3445	.3737	41.47	12.35	.2598	557.1	.7854-02
35	.00000	13.5000	.85.000	.2985	.3451	.3743	41.48	12.38	.2597	556.7	.7868-02
35	.00000	14.150	.87.000	.3244	.3751	.4069	41.49	13.46	.2595	556.4	.8562-02
35	.25000	.25000	.88.000	.3265	.3775	.4095	41.49	13.55	.2595	556.4	.8607-02

DATE 28 MAR 79

AMES OH58 HEATING AND PRESSURE DATA

PAGE 91

(R2XB29)

FLAT PLATE

OH58 FUSELAGE/ELEVON-HEATING

FLAT PLATE

PARAMETRIC DATA

ALPHA = 30.00
ELEVON = .00000
RN/L = 1.500

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	RN/FT /FT	PT PSIA	T _t DEG. R	HT LB/IN LBM	P _{INF} PSIA	T _{INF} DEG. R	RHO SLUGS/ FT ³	V _{INF} FT/SEC	SCALE
23 30.00	.0000	.0000	7.300	.1563+07	576.7	1945.	489.2	.9974-01	174.9	.4786-04	.4732.	.4000-01

RUN NUMBER PHI DEG.
HS SPHERE TH=540
.1324

TEST DATA

RUN NUMBER	Y	X	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	GREF BTU/ FT ² SEC	QDOT BTU/ FT ² SEC	HM/HT	TM DEG. R	STN NO R=0.9
23 -25000	14.150	86.000	.3574	.1139	.4494	.47.46	16.96	.2669	544.1	.7517-02	
23 .00000	.90000	.75.000	.2177	.2521	.2738	.47.40	10.32	.2677	545.7	.4579-02	
23 .00000	1.50000	76.000	.1697	.1965	.2134	.47.41	8.044	.2675	545.4	.3569-02	
23 .00000	1.87500	77.000	.1442	.1670	.1814	.47.43	6.842	.2672	544.8	.3033-02	
23 .00000	3.00000	78.000	.1448	.1677	.1821	.47.43	6.868	.2673	544.9	.3046-02	
23 .00000	3.60000	81.000	.1520	.1761	.1912	.47.41	7.208	.2676	545.5	.3197-02	
23 .00000	7.2000	82.000	.3722	.4311	.4681	.47.39	17.64	.2678	546.0	.7829-02	
23 .00000	10.800	83.000	.3650	.492	.552	.47.41	17.16	.2675	545.4	.7614-02	
23 .00000	12.900	84.000	.3558	.420	.4473	.47.44	16.88	.2671	544.6	.7482-02	
23 .00000	13.500	85.000	.3291	.3812	.439	.47.44	15.61	.2672	544.7	.6942-02	
23 .00000	14.150	87.000	.3524	.4980	.4430	.47.45	16.72	.2670	544.4	.7411-02	
23 .25000	14.150	88.000	.3619	.491	.4551	.47.45	17.18	.2669	544.2	.7612-02	

DATE 28 MAR 79

AMES OH58 HEATING AND PRESSURE DATA

OH58 FUSELAGE/ELEVON-HEATING

PAGE 92
(R2X830)

FLAT PLATE

FLAT PLATE

ALPHA = 30.00 BETA = 0.000
ELEVON = 10.00 RN/L = 1.500

LENGTH = 14.40

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	HACH	RN/FT	PT PSIA	TT DEG. R	HT BTU LBH	P INF PSIA	T INF DEG. R	RHO SLUGS/ FT ³	V INF FT/SEC	SCALE
27	30.00	.0000	7.300	.1482+07	581.0	2012.	507.6	.9984-01	181.5	.4617-04	4820.	.4000-01

RUN NUMBER	PHI DEG.	HS SPHERE TW=540	1328
27	.0000		

TEST DATA

RUN NUMBER	Y	X	T/C NO	H/HREF R=1.0	H/HREF R=0.9	QREF BTU FT ² SEC	QOT BTU FT ² SEC	HW/HF	HW	DEG. R	STN NO R=0.9
27	- .25000	14.150	86.000	.3359	.3885	.4214	.49.82	16.73	.2607	551.6	.7204-02
27	.00000	.90000	75.000	.2119	.2451	.2660	.49.74	10.54	.2619	553.9	.4546-02
27	.00000	1.5000	76.000	.1659	.1919	.2082	.49.75	8.263	.2617	553.6	.3558-02
27	.00000	1.8750	77.000	.1372	.1587	.1722	.49.78	6.832	.2613	552.7	.2943-02
27	.00000	3.0000	78.000	.1459	.1687	.1831	.49.78	7.263	.2613	552.7	.3129-02
27	.00000	3.6000	81.000	.1592	.1842	.1998	.49.77	7.926	.2614	553.0	.3415-02
27	.00000	7.2000	82.000	.3720	.4302	.4667	.49.78	18.52	.2612	552.6	.7977-02
27	.00000	10.800	83.000	.3473	.4017	.4358	.49.80	17.30	.2610	552.1	.7449-02
27	.00000	12.900	84.000	.3310	.3828	.4153	.49.82	16.49	.2608	551.7	.7099-02
27	.00000	13.500	85.000	.3187	.3686	.3998	.49.81	15.88	.2608	551.7	.6835-02
27	.00000	14.150	87.000	.3449	.3988	.4327	.49.83	17.18	.2606	551.4	.7396-02
27	.25000	14.150	88.000	.3494	.4040	.4383	.49.83	17.41	.2606	551.3	.7492-02

DATE 28 MAR 79

AMES OH58 HEATING AND PRESSURE DATA

PAGE 93

(R2X931)

OH58 FUSELAGE/ELEVON-HEATING

FLAT PLATE

		ALPHA = 30.00		BETA = 0000		MACH = 7.300		LENGTH = 14.40	
		ELEVON = -10.00		RNL = 1.500					

RUN NUMBER	ALPHA DEG.	MACH	PN/FT /FT	PT PSIA	T _T DEG. R	HT BTU/ LBH	PINF PSIA	TINF DEG. R	RHO SLUGS/ FT ³	VINF FT/SEC	SCALE
36	30.00	.0000	7.300	.1414+07	587.1	2077.	.1002	187.9	.4476-04	4905.	.4000-01

TEST CONDITIONS

RUN NUMBER	PHI DEG.	HS SPHERE TH=540	1335	T/C NO	H/HREF R=1.0	H/HREF R=0.9	QREF BTU/ FT ² SEC	Q00T BTU/ FT ² SEC	HM/HT	TM DEG. R	STN NO R=0.9
36	.0000										

TEST DATA

RUN NUMBER	Y	X	T/C NO	H/HREF R=1.0	H/HREF R=0.9	QREF BTU/ FT ² SEC	Q00T BTU/ FT ² SEC	HM/HT	TM DEG. R	STN NO R=0.9	
36	-25000	14.150	86.000	.3353	.3972	.4197	.52.30	17.54	.2540	556.4	.7312-02
36	.00000	.90000	.75.000	.2172	.2508	.2719	.52.26	11.35	.2546	557.7	.4736-02
36	.00000	1.50000	.76.000	.1710	.1975	.2140	.52.25	8.933	.2547	558.0	.3729-02
36	.00000	1.87500	.77.000	.1417	.1636	.1773	.52.30	7.409	.2541	556.6	.3090-02
36	.00000	3.00000	.78.000	.1451	.1676	.1817	.52.28	7.587	.2543	557.0	.3165-02
36	.00000	3.60000	.81.000	.1600	.1847	.2003	.52.25	8.358	.2547	557.9	.3489-02
36	.00000	7.20000	.82.000	.3656	.4223	.4578	.52.20	19.09	.2553	559.4	.7975-02
36	.00000	10.800	.83.000	.3167	.4005	.4342	.52.23	18.11	.2550	558.6	.7563-02
36	.00000	12.900	.84.000	.3335	.3852	.4175	.52.28	17.44	.2544	557.2	.7274-02
36	.00000	13.500	.85.000	.3155	.3643	.3949	.52.28	16.49	.2543	557.1	.6881-02
36	.00000	14.150	.87.000	.3282	.3906	.4234	.52.29	17.69	.2542	556.8	.7377-02
36	.00000	14.150	.88.000	.3457	.3992	.4327	.52.30	18.08	.2540	556.4	.7539-02

DATE 28 MAR 79

AMES 0H5B HEATING AND PRESSURE DATA

0H5B FUSELAGE/ELEVON-HEATING

FUSELAGE

	ALPHA DEG.	MACH	RN/FT Ft	PT PSIA	TT DEG. R	HT BTU/ LBH	BETA RN/L	.0000	MACH	.0000	LENGTH = 14.40	
31	30.00	.0000	7.300	.5082+06	195.9	1993.	502.4	.3373-01	179.6	.1576-04	.4795.	.4000-01

PARAMETRIC DATA

RUN NUMBER	PHI DEG.	HS SPHERE TH=540 .7714-01
31	.0000	

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	MACH	RN/FT Ft	PT PSIA	TT DEG. R	HT BTU/ LBH	BETA RN/L	PINF PSIA	TINF DEG. R	RHO SLUGS/ FT ³	VINF FT/SEC	SCALE
31	30.00	.0000	7.300	.5082+06	195.9	1993.	502.4	.3373-01	179.6	.1576-04	.4795.	.4000-01

TEST DATA

RUN NUMBER	Z	X	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT ² SEC	QDOT BTU/ FT ² SEC	H/H/HT	TW DEG. R	SIN NO R=0.9
31	12500	.69000	43.000	.8499-01	.9835-01	.1067	28.52	.2424	.2638	.552.3	.3119-02
31	12500	1.06410	42.000	.1047	.1211	.1315	28.52	.2.986	.2638	.552.4	.3812-02
31	12500	1.4370	41.000	.1112	.1286	.1396	28.53	.3.72	.2635	.551.9	.4079-02
31	12500	2.2930	40.000	.0000	.0000	.0000	28.53	.0000	.0000	.0000	.0000
31	12500	2.6990	39.000	.1207	.1396	.1515	28.53	.3.443	.2635	.551.7	.4429-02
31	12500	.69000	49.000	.2513-01	.2508-01	.2516-01	28.51	.7165	.2640	.552.7	.9222-03
31	37500	1.06410	48.000	.3486-01	.4034-01	.4379-01	28.51	.9941	.2639	.552.7	.1279-02
31	37500	1.4370	47.000	.4042-01	.4678-01	.5076-01	28.52	.1.53	.2638	.552.4	.1493-02
31	37500	2.2930	46.000	.5207-01	.6604-01	.7167-01	28.52	.6228	.2637	.552.2	.2094-02
31	37500	2.6990	45.000	.5613-01	.62382-01	.6928-01	28.45	.1.568	.2656	.551.1	.2023-02
31	37500	.69000	55.000	.9862-02	.1155-01	.1254-01	28.52	.2847	.2638	.552.4	.3663-03
31	62500	1.06410	54.000	.1548-01	.1791-01	.1944-01	28.52	.4413	.2638	.552.4	.5679-03
31	62500	1.4370	53.000	.2.00-01	.2430-01	.2537-01	28.53	.5989	.2637	.552.1	.7705-03
31	62500	2.2930	52.000	.3832-01	.4434-01	.4811-01	28.54	.1.094	.2633	.551.3	.1406-02
31	62500	2.6990	51.000	.3775-01	.4368-01	.4741-01	28.52	.1.077	.2637	.552.2	.1389-02
31	62500	.00000	62.000	.0000	.0000	.0000	28.52	.0000	.0000	.0000	.0000
31	.87500	.69000	61.000	.4972-02	.6245-02	.6245-02	28.51	.1417	.2641	.553.0	.1825-03
31	.87500	1.0640	60.000	.8231-02	.9525-02	.1034-01	28.51	.2347	.2640	.552.8	.3021-03
31	.87500	1.4370	59.000	.1375-01	.1591-01	.1727-01	28.52	.3920	.2639	.552.6	.5045-03
31	.87500	2.2930	58.000	.0000	.0000	.0000	28.52	.0000	.0000	.0000	.0000
31	.87500	2.6990	57.000	.0000	.0000	.0000	28.52	.0000	.0000	.0000	.0000

PAGE 94

(R2XC18)

DATE 28 MAR 79

AMES OH5B HEATING AND PRESSURE DATA

OH5B FUSELAGE/ELEVON-HEATING

PAGE 95

(R2XC18)

RUN NUMBER	Z	X	T/C NO	FUSELAGE			HW/HT	TW DEG. R	STN NO R=0.9
				H/HREF R=1.0	H/HREF R=0.9	QREF BTU/ FT2SEC			
31	1.1250	.00000	68.000	.0000	.0000	.0000	.0000	.0000	.0000
31	1.1250	.69000	67.000	.3098-02	.3586-02	.3892-02	.28.49	.2644	.553.7
31	1.1250	1.0640	66.000	.4851-02	.5614-02	.6093-02	.28.50	.2643	.553.4
31	1.1250	1.4370	65.000	.8850-02	.1024-01	.1112-01	.28.51	.2623	.553.0
31	1.1250	2.2930	64.000	.1844-01	.2134-01	.2316-01	.28.52	.5261	.552.2
31	1.1250	2.6990	63.000	.1713-01	.1982-01	.2151-01	.28.53	.4987	.552.1
31	1.3750	.00000	74.000	.0000	.0000	.0000	.0000	.0000	.0000
31	1.3750	.69000	73.000	.1850-02	.2141-02	.2323-02	.28.48	.5268-01	.554.2
31	1.3750	1.0640	72.000	.2499-02	.2892-02	.3139-02	.28.49	.7119-01	.2645
31	1.3750	1.4370	71.000	.5790-02	.6700-02	.7272-02	.28.50	.1650	.553.4
31	1.3750	2.2930	70.000	.1061-01	.1227-01	.1332-01	.28.51	.3024	.552.8
31	1.3750	2.6990	69.000	.1090-01	.1261-01	.1368-01	.28.52	.3108	.552.3

DATE 28 MAR 79

AMES 0458 HEATING AND PRESSURE DATA

0458 FUSELAGE/ELEVON-HEATING

FUSELAGE

PAGE 96
(R2XC19)

FUSELAGE

ALPHA = 30.00
ELEVON = 10.00
RN/L = .5000

TEST CONDITIONS

MACH = .7300
RN/FT = .4946+06
PT PSIA = 192.2
TT DEG. R = 2002.
BTU/LBM = 504.9BETA DEG. = 0000
HS SPHERE
TW=540
7640-01

TEST DATA

RUN NUMBER	Z	X	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QDOT BTU/FT2SEC	QDET BTU/FT2SEC	HM/HT	HM/HT	TM DEG. R	STN NO R=0.9
30	.12500		43.000	.69000	.6350-01	.7347-01	.7973-01	.804	.2629	.553	.1	.2360-02
30	.12500		42.000	.6840	.5683-01	.6576-01	.7136-01	.41	.2629	.553	.2	.2112-02
30	.12500		41.000	.4370	.4683-01	.5417-01	.5879-01	.42	.1.331	.2627	.7	.1740-02
30	.12500		40.000	.2.6930	.00000	.0000	.0000	.0000	.00000	.00000	.0000	.0000
30	.12500		39.000	.2.6990	.3567-01	.4127-01	.4479-01	.42	.1.014	.2628	.0	.1326-02
30	.12500		49.000	.69000	.1722-01	.1993-01	.2162-01	.40	.4891	.2631	.7	.6401-03
30	.37500		48.000	.0610	.2099-01	.2429-01	.2636-01	.40	.5963	.2631	.6	.7803-03
30	.37500		47.000	.4370	.2358-01	.2739-01	.2973-01	.41	.6727	.2630	.5	.8801-03
30	.37500		46.000	.2.2930	.4878-01	.5644-01	.6124-01	.41	.1.386	.2630	.3	.1813-02
30	.37500		45.000	.2.6990	.4377-01	.5067-01	.5500-01	.33	.1.240	.2649	.5	.1627-02
30	.62500		55.000	.69000	.6366-02	.7365-02	.7993-02	.41	.1.808	.2631	.5	.2366-03
30	.62500		54.000	.0610	.1170-01	.1354-01	.1470-01	.41	.3325	.2631	.5	.4350-03
30	.62500		53.000	.4370	.1875-01	.2169-01	.2354-01	.41	.5326	.2630	.3	.6968-03
30	.62500		52.000	.2.2930	.3923-01	.4539-01	.4925-01	.42	.1.115	.2627	.7	.1458-02
30	.62500		51.000	.2.6990	.3397-01	.3931-01	.4266-01	.40	.9649	.2631	.6	.1263-02
30	.87500		62.000	.00000	.00000	.00000	.00000	.00	.00000	.00000	.0000	.0000
30	.87500		61.000	.69000	.3318-02	.3839-02	.4156-02	.39	.9421-01	.2633	.1	.1233-03
30	.87500		60.000	.0610	.5895-02	.7978-02	.8658-02	.40	.1.958	.2633	.9	.2563-03
30	.87500		59.000	.4370	.1096-01	.1268-01	.1376-01	.40	.3112	.2632	.7	.4072-03
30	.87500		58.000	.2.2930	.00000	.00000	.00000	.00	.00000	.00000	.0000	.0000
30	.87500		57.000	.2.6990	.00000	.00000	.00000	.00	.00000	.00000	.0000	.0000

0059 FUSE AGE/ELEVON-HEATING FUSE AGE

1024/101

RUN NUMBER	Z	X	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	GREF BTU/ FT2SEC	ODOT BTU/ FT2SEC	HW/HIT	TW DEG. R	STN NO R=0.9
30	-1.250	.00000	.00000	.1438-02	.1664-02	.1806-02	.28.38	.40000	.00000	.554.8	.5345-04
30	.69000	.67.000	.65.000	.4513-02	.5223-02	.5668-02	.28.39	.40000	.2637	.554.5	.1678-03
30	.1250	.1.0640	.1.0640	.793-02	.8323-02	.9033-02	.28.39	.1281	.2635	.554.2	.2674-03
30	.1250	.1.4370	.65.000	.1295-01	.1498-01	.1626-01	.28.40	.2042	.2634	.553.8	.4813-03
30	.1250	.2.2930	.64.000	.1402-01	.1623-01	.1761-01	.28.41	.3678	.2632	.553.4	.5212-03
30	.1250	.2.6990	.63.000	.00000	.00000	.00000	.28.41	.3994	.2630	.553.0	.3061-04
30	.1.3750	.00000	.79.000	.00000	.00000	.00000	.28.37	.2337-01	.2639	.554.7	.5138-04
30	.1.3750	.69000	.73.000	.8233-03	.9530-03	.1034-02	.28.38	.3923-01	.2637	.554.5	.1696-03
30	.1.3750	.1.0640	.72.000	.1.382-02	.1.600-02	.1.736-02	.28.39	.5730-02	.2635	.554.0	.2956-03
30	.1.3750	.1.4370	.71.000	.4563-02	.5280-02	.5730-02	.28.39	.9985-02	.2258	.2633	.3424-03
30	.1.3750	.2.2930	.70.000	.7952-02	.9201-02	.9985-02	.28.40	.1157-01	.2616	.553.7	.2631
30	.1.3750	.2.6990	.69.000	.9211-02	.10665-01	.1157-01	.28.40	.00000	.00000	.553.0	.3051-04

DATE 28 MAR 79

AMES 0458 HEATING AND PRESSURE DATA

PAGE 98

0458 FUSELAGE/ELEVON-HEATING

(R2XC20)

FUSELAGE

	ALPHA DEG.	BETA DEG.	MACH	RN/FT /FT	PT PSIA	TT DEG. R	HT BTU/ LBM	PINF PSIA	TINF DEG. R	RHO SLUGS/ FT ³	VINF FT/SEC	SCALE
	= 30.00	= -10.00				=	= .5000	= .0000	= 7.300			LENGTH = 14.40
ELEVON	= -10.00											

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	RN/FT /FT	PT PSIA	TT DEG. R	HT BTU/ LBM	PINF PSIA	TINF DEG. R	RHO SLUGS/ FT ³	VINF FT/SEC	SCALE
33	30.00	.0000	7.300	.4884+06	190.0	2003.	505.2	.3267-01	180.6	.1518-04	4809.	.4000-01

RUN NUMBER	PHI DEG.	HS SPHERE TH-540 7596-01	X
33	.0000		

TEST DATA

RUN NUMBER	Z	X	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QRF BTU/ FT ² SEC	QDOT BTU/ FT ² SEC	HM/HT	HM/HT	TW DEG. R	STN NO R=0.9
33	12500	.69000	43.000	.7148-01	.8267-01	.8969-01	28.34	2.026	.2612	.2612	.550.1	.2673-02
33	12500	.69000	42.000	.7441-01	.8607-01	.9338-01	28.34	2.109	.2613	.2613	.550.3	.2782-02
33	12500	.69000	41.000	.7370-01	.8523-01	.9247-01	28.34	2.089	.2612	.2612	.549.9	.2756-02
33	12500	.69000	40.000	.5669-01	.6556-01	.7113-01	28.34	1.606	.2613	.2613	.550.1	.2120-02
33	12500	.69000	39.000	.5342-01	.6179-01	.6704-01	26.35	1.514	.2615	.2615	.550.6	.1998-02
33	12500	.69000	49.000	.3683-01	.4259-01	.4621-01	28.33	1.043	.2614	.2614	.550.4	.1377-02
33	37500	.69000	48.000	.6009-01	.6950-01	.7541-01	28.33	1.703	.2614	.2614	.550.4	.2247-02
33	37500	.69000	47.000	.8425-01	.9745-01	.1057	28.34	2.388	.2613	.2613	.550.2	.3150-02
33	37500	.69000	46.000	.1233	.1426	.1547	28.34	3.494	.2613	.2613	.550.2	.4611-02
33	37500	.69000	45.000	.1412	.1634	.1774	28.21	3.584	.2643	.2643	.556.6	.5281-02
33	37500	.69000	55.000	.1267-01	.1465-01	.1590-01	28.34	.3591	.2613	.2613	.550.1	.4738-03
33	62500	.69000	54.000	.1771-01	.2049-01	.2222-01	28.34	.5020	.2612	.2612	.550.1	.6623-03
33	62500	.69000	53.000	.2545-01	.2944-01	.3194-01	28.35	.7215	.2611	.2611	.549.8	.9517-03
33	62500	.69000	52.000	.5329-01	.6163-01	.6686-01	28.36	1.511	.2608	.2608	.549.1	.1993-02
33	62500	.69000	51.000	.7632-01	.8827-01	.9576-01	28.34	2.163	.2611	.2611	.549.9	.2854-02
33	.87500	.00000	62.000	.00000	.00000	.00000		.00000			.00000	.00000
33	.87500	.69000	61.000	.5846-02	.6761-02	.7336-02	28.33	.1656	.2614	.2614	.550.4	.2186-03
33	.87500	.69000	60.000	.9400-02	.1087-01	.1180-01	28.34	.2654	.2613	.2613	.550.3	.3515-03
33	.87500	.69000	59.000	.1622-01	.1876-01	.2035-01	28.34	.4596	.2612	.2612	.550.0	.6064-03
33	.87500	.69000	58.000	.00000	.00000	.00000		.00000			.00000	.00000
33	.87500	.69000	57.000	.00000	.00000	.00000		.00000			.00000	.00000

DATE 28 MAR 79

AMES OH5B HEATING AND PRESSURE DATA

		0H5B FUSelage/ELEVon-HEATING		FUSelage	
RUN NUMBER	Z	X	T/C NO	H/HREF R=1.0	H/HREF R=0.9
33	1.1250	.00000	68.000	.0000	.0000
33	1.1250	.69000	67.000	.3934-02	.4555-02
33	1.1250	1.0640	66.000	.6469-02	.7482-02
33	1.1250	1.4370	65.000	.1321-01	.1529-01
33	1.1250	2.2930	64.000	.2327-01	.2692-01
33	1.1250	2.6990	63.000	.2259-01	.2613-01
33	1.3750	.00000	74.000	.0000	.0000
33	1.3750	.69000	73.000	.1863-02	.2154-02
33	1.3750	1.0640	72.000	.3560-02	.4118-02
33	1.3750	1.4370	71.000	.7869-02	.9101-02
33	1.3750	2.2930	70.000	.1439-01	.1664-01
33	1.3750	2.6990	69.000	.1490-01	.1724-01

PAGE 99
(R2XC20)

STN NO R=0.9	TW DEG. R	HW/HT	QDOT BTU/ FT2SEC	QREF BTU/ FT2SEC	HW/HT	TW DEG. R	STN NO R=0.9
-----------------	--------------	-------	------------------------	------------------------	-------	--------------	-----------------

.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000
--------	--------	--------	--------	--------	--------	--------	--------

.1471-03	.2419-03	.2615	.550.7	.1114	.2617	.551.0	.00000
----------	----------	-------	--------	-------	-------	--------	--------

.4940-03	.8702-03	.550.5	.549.4	.1833	.3743	.6599	.2614
----------	----------	--------	--------	-------	-------	-------	-------

.8448-03	.549.2	.2609	.549.2	.28.32	.28.33	.28.35	.2608
----------	--------	-------	--------	--------	--------	--------	-------

.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00000
--------	--------	--------	--------	--------	--------	--------	--------

.1331-03	.2942-03	.550.5	.549.8	.28.31	.4468-02	.9874-02	.2229
----------	----------	--------	--------	--------	----------	----------	-------

.5381-03	.5573-03	.549.1	.549.3	.1008	.4079	.1806-01	.4226
----------	----------	--------	--------	-------	-------	----------	-------

.6966-04	.2619	.551.5	.549.3	.28.32	.2617	.551.2	.2614
----------	-------	--------	--------	--------	-------	--------	-------

.1331-03	.550.5	.549.8	.549.3	.28.33	.2611	.549.1	.2609
----------	--------	--------	--------	--------	-------	--------	-------

DATE 28 MAR 79

AMES 0458 HEATING AND PRESSURE DATA
OH58 FUSELAGE/ELEVON-HEATING

FUSELAGE

ALPHA = 30.00
ELEVON = .0000MACH = .0000
RNL = .7500PARAMETRIC DATA
FUSELAGEALPHA = 30.00
ELEVON = .0000MACH = .0000
RNL = .7500PARAMETRIC DATA
FUSELAGE

RUN NUMBER	Z	X	T/C NO	H/HREF R=1.0	H/HREF R=0.9	HT	DEG. R	BTU/LBM	BTU/F13	PINF PSIA	TINF DEG. R	RHO SLUGS/F13	VINF FT/SEC	SCALE
32	30.00	.0000	7.300	.7785+06	282.5	1965.		431.6		.5049+01	176.8	.2396-04	4758.	.4000-01
32	32	.0000												

TEST CONDITIONS...													
RUN NUMBER	Z	X	T/C NO	H/HREF R=1.0	H/HREF R=0.9	HT	DEG. R	BTU/LBM	BTU/F13				
32	12500	.69000	43.000	1157	1340	1455	34.21	3.950		.2660		548.3	.3442-02
32	12500	.69000	42.000	1318	1525	1656	34.20	4.507		.2661		548.5	.3918-02
32	12500	.69000	41.000	1315	1522	1653	34.22	4.500		.2658		548.0	.3911-02
32	2.2930	.69000	40.000	1409	1631	1770	34.22	4.821		.2657		547.8	.4189-02
32	12500	.69000	39.000	1518	1757	1907	34.21	5.191		.2661		548.6	.4513-02
32	12500	.69000	39.000	3313-01	3835-01	4165-01	34.20	5.133		.2662		548.8	.9854-03
32	37500	.69000	49.000	4837-01	5252-01	5624-01	34.20	4.428		.2663		548.9	.1213-02
32	37500	.69000	48.000	4178-01	4837-01	5252-01	34.20	4.428		.2664		548.9	.1213-02
32	37500	.69000	47.000	4578-01	5298-01	5752-01	34.21	5.565		.2661		548.5	.1361-02
32	2.2930	.69000	46.000	5844-01	6766-01	7345-01	34.21	5.999		.2661		548.6	.1738-02
32	37500	.69000	45.000	5653-01	6544-01	7105-01	34.21	5.934		.2660		548.3	.1681-02
32	37500	.69000	55.000	1201-01	1390-01	1509-01	34.21	4.108		.2661		548.5	.3571-03
32	62500	.69000	54.000	1773-01	2052-01	2228-01	34.20	6.063		.2661		548.5	.5272-03
32	62500	.69000	53.000	2287-01	2648-01	2875-01	34.21	7.826		.2659		548.1	.6802-03
32	62500	.69000	52.000	3625-01	4196-01	4555-01	34.23	1.241		.2656		547.5	.1078-02
32	62500	.69000	51.000	3640-01	4214-01	4575-01	34.21	1.245		.2660		548.4	.1083-02
32	87500	.69000	62.000	0.0000	0.0000	0.0000	34.21	0.0000		.0000		548.4	.0000
32	87500	.69000	61.000	5278-02	7268-02	7891-02	34.20	2.147		.2662		548.7	.1867-03
32	87500	.69000	60.000	9153-02	11060-01	1150-01	34.20	3.131		.2661		548.6	.2722-03
32	87500	.69000	59.000	1377-01	1594-01	1731-01	34.21	4.711		.2659		548.1	.4095-03
32	2.2930	.69000	58.000	0.0000	0.0000	0.0000	34.21	0.0000		.0000		548.1	.0000
32	87500	.69000	57.000	0.0000	0.0000	0.0000	34.21	0.0000		.0000		548.1	.0000

PAGE 100
(R2XC21)

DATE 28 MAR 79

AMES OH58 HEATING AND PRESSURE DATA

PAGE 101

(R2XC21)

RUN NUMBER	Z	X	T/C NO	OH58 FUSELAGE/ELEVON-HEATING		FUSELAGE		H/H _{REF} R=1.0	H/H _{REF} R=0.9	QREF. BTU/ FT ² SEC	QDOT. BTU/ FT ² SEC	TH/H _T	TH	STN NO R=0.9
				H/H _{REF}	H/H _{REF} R=0.85	QREF.	QDOT.							
32	1.1250	.69000	68.000	.00000	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
32	1.1250	.69000	67.000	.4069-02	.4712-02	.5115-02	.34.19	.1391	.2664	.549.2	.1210-03			
32	1.1250	.69000	66.000	.5291-02	.6126-02	.6651-02	.34.19	.1809	.2663	.549.0	.1574-03			
32	1.1250	.69000	65.000	.8365-02	.9685-02	.1051-01	.34.21	.2861	.2661	.548.5	.2488-03			
32	1.1250	.69000	64.000	.1887-01	.2185-01	.2372-01	.34.22	.6458	.2658	.548.0	.5613-03			
32	1.1250	.69000	63.000	.1739-01	.2012-01	.2185-01	.34.22	.5948	.2659	.548.0	.5170-03			
32	1.1250	.69000	71.000	.00000	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
32	1.3750	.69000	73.000	.3569-02	.4132-02	.4486-02	.34.18	.1220	.2666	.549.6	.1061-03			
32	1.3750	.69000	72.000	.2584-02	.2992-02	.3249-02	.34.19	.8835-01	.2664	.549.2	.7686-04			
32	1.3750	.69000	71.000	.5687-02	.6584-02	.7148-02	.34.20	.1945	.2661	.548.6	.1691-03			
32	1.3750	.69000	70.000	.1103-01	.1277-01	.1387-01	.34.21	.3775	.2660	.548.3	.3281-03			
32	1.3750	.69000	69.000	.1045-01	.1210-01	.1314-01	.34.21	.3576	.2659	.548.1	.3108-03			

DATE 28 MAR 79

AMES OH58 HEATING AND PRESSURE DATA

OH58 FUSELAGE/ELEVON-HEATING

FUSELAGE

	ALPHA DEG.	MACH	RN/FT /FT	PT PSIA	T _T DEG. R	HT BTU/ LB _m	BETA RN/L	0.0000	MACH	7.300	LENGTH = 14.40
ELEVON	10.00										

PARAMETRIC DATA

	ALPHA DEG.	MACH	RN/FT /FT	PT PSIA	T _T DEG. R	HT BTU/ LB _m	BETA RN/L	0.0000	MACH	7.300	LENGTH = 14.40
ELEVON	10.00										

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	RN/FT /FT	PT PSIA	T _T DEG. R	HT BTU/ LB _m	P _{INF} PSIA	T _{INF} DEG. R	RHO SLUGS/ FT ³	VINF FT/SEC	SCALE
28	30.00	.0000	7.300	.7867+06	289.7	1943.	468.7	.5012-01	174.7	.2408-04	4729.	.40000-01
RUN NUMBER	PHI DEG.											
28	.0000											

TEST DATA

RUN NUMBER	Z	X	T/C NO	H/HREF R=1.0	H/HREF R=0.9	QREF R=0.85	QDOT BTU/ FT ² SEC	H/H/HT	HW/HT	TW DEG. R	STN NO R=0.9	
28	12500			43.000	106.9	1239	1346	33.47	3.579	2.922	549.2	.3172-02
28	12500	1.0640		42.000	.8731-01	.1012	.1099	33.47		.2697	549.2	.2589-02
28	12500	1.4370		41.000	.6631-01	.7883-01	.8344-01	33.48	2.220	.2694	548.8	.1967-02
28	12500	2.2930		40.000	.4407-01	.5106-01	.5546-01	33.48	1.476	.2694	548.6	.1307-02
28	12500	2.6990		39.000	.4322-01	.5008-01	.5439-01	33.47	1.447	.2697	549.2	.1282-02
28	12500	49.000		49.000	.2680-01	.3105-01	.3373-01	33.46	.8965	.2699	549.7	.7948-03
28	37500	1.0640		46.000	.3005-01	.3482-01	.3782-01	33.46	1.005	.2699	549.7	.8914-03
28	37500	1.4370		47.000	.3559-01	.4123-01	.4479-01	33.47	1.191	.2697	549.3	.1056-02
28	37500	2.2930		46.000	.5699-01	.6603-01	.7172-01	33.47	1.907	.2697	549.3	.1690-02
28	37500	45.000		2.6990	.4936-01	.5722-01	.6217-01	33.36	1.647	.2718	553.5	.1465-02
28	62500	55.000		55.000	.1099-01	.1170-01	.1271-01	33.41	.3372	.2709	551.8	.2995-03
28	62500	1.0640		54.000	.1523-01	.1765-01	.1917-01	33.40	.5086	.2710	551.9	.4517-03
28	62500	1.4370		53.000	.2411-01	.2795-01	.3036-01	33.41	.8059	.2708	551.5	.7155-03
28	62500	2.2930		52.000	.4456-01	.564-01	.5610-01	33.43	1.490	.2704	550.7	.1322-02
28	62500	51.000		2.6990	.3569-01	.4135-01	.4491-01	33.47	1.194	.2697	549.3	.1056-02
28	87500	.00000		62.000	.00000	.00000	.00000	.0000	.0000	.00000	.00000	.00000
28	87500	.69000		61.000	.5270-02	.6108-02	.6636-02	33.40	.1760	.2711	552.1	.1563-03
28	87500	1.0640		60.000	.7593-02	.8788-02	.9547-02	33.40	.2533	.2711	552.0	.2249-03
28	87500	1.4370		59.000	.1229-01	.1425-01	.1548-01	33.41	.4107	.2708	551.6	.3649-03
28	87500	58.000		57.000	.00000	.00000	.00000	.0000	.00000	.00000	.00000	.00000
28	87500	2.6990		2.6990	.00000	.00000	.00000	.0000	.00000	.00000	.00000	.00000

DATE 28 MAR 79

AMES OH58 HEATING AND PRESSURE DATA

PAGE 103

(R2XC22)

RUN NUMBER	Z	X	T/C NO	OH58 FUSelage/ELEVon-HEATING		FUSELAGE		H/WHT	TW	DEG. R	STN NO R=0.9
				H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	QREF BTU/ FT2SEC				
28	1.1250	.00000	68.000	.0000	.0000	.0000	.0000	.0000	.2714	.552.7	.1045-03
28	1.1250	.69000	67.000	.3524-02	.4085-02	.4438-02	.33.38	.1176	.2714	.552.7	.1045-03
28	1.1250	1.0640	66.000	.4329-02	.5018-02	.5451-02	.33.39	.1446	.2712	.552.4	.1284-03
28	1.1250	1.4370	65.000	.6942-02	.8016-02	.8740-02	.33.40	.2319	.2710	.552.0	.2059-03
28	1.1250	2.2930	64.000	.1581-01	.1833-01	.1991-01	.33.41	.5284	.2708	.551.4	.4691-03
28	1.1250	2.6990	63.000	.1504-01	.1743-01	.1893-01	.33.42	.5025	.2707	.551.4	.4461-03
28	1.3750	.00000	74.000	.0000	.0000	.0000	.0000	.0000	.2715	.553.0	.4529-04
28	1.3750	.69000	73.000	.1527-02	.1770-02	.1923-02	.33.38	.5096-01	.2714	.552.6	.5711-04
28	1.3750	1.0640	72.000	.1925-02	.2231-02	.2424-02	.33.39	.6427-01	.2711	.552.1	.1303-03
28	1.3750	1.4370	71.000	.4391-02	.5089-02	.5629-02	.33.40	.1467	.2708	.551.5	.2850-03
28	1.3750	2.2930	70.000	.9607-02	.1113-01	.1209-01	.33.41	.3210	.2707	.551.3	.2902-03
28	1.3750	2.6990	69.000	.9783-02	.1134-01	.1232-01	.33.42	.3269			

DATE 28 MAR 79

AMES OH-58 HEATING AND PRESSURE DATA

卷之三

FUSELAGE / ELEVON -HEATING

145

卷之三

三
二
一

PARAMETRIC DATA
ALPHA = 30.00 BETA = .0000 MACH = 7.300 LENGTH = 14.40
ELEVON = -10.00 GND = 7500

TEST DATA

DATE 28 MAR 79

THERMOCHEMICAL CYCLES OF 158 HEATING AND PRESSURE DATA

PAGE 106
R2XC241

PARAMETRIC DATA							
	ALPHA = 30.00	BETA = 0000	MACH = 7.300	LENGTH = 14.40			
	ELEVON = .0000	RN/L = .7500					
TEST CONDITIONS							
RUN	ALPHA DEG.	MACH	RN/FT /FT	PT PSIA	TT DEG. R	HT BTU/ LBM	PINF PSIA
24	30.00	.0000	7.300	.7711+06	289.3	1963.	494.2
RUN	PHI DEG.	HS SPHERE TH=540					
24	.0000	.9374-01					

HT II

TEST DATA

RUN NUMBER	Z	X	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.8	H/HREF R=0.75	GDOT BTU/SEC	DEG. R	DEG. H	STN NO R=0.9
24	.12500	.69000	43.000	.1027	.1169	.1291	.1399	.3.483	.2675	.561 0	.3070-02
24	.12500	.42.000	42.000	.1208	.1339	.1519	.1539	.33.92	.2676	.551 .2	.3611-02
24	.12500	1.4370	41.000	.1224	.1418	.1539	.1445	.4.154	.2673	.550 .4	.3659-02
24	.12500	2.2930	40.000	.1149	.1330	.1455	.1623	.33.94	.2670	.549 .9	.3434-02
24	.12500	1.2500	39.000	.1291	.1495	.1620	.1623	.33.94	.2670	.549 .9	.3659-02
24	.12500	1.6990	49.000	.2940-01	.3404-01	.3697-01	.3697-01	.33.91	.2677	.551 .4	.8167-03
24	.12500	.69000	49.000	.2940-01	.3404-01	.3697-01	.3697-01	.33.91	.2677	.551 .3	.1168-02
24	.12500	1.0640	48.000	.3907-01	.4525-01	.4914-01	.4914-01	.33.91	.2675	.550 .9	.289-02
24	.12500	.37500	48.000	.4313-01	.4994-01	.5423-01	.5423-01	.33.92	.2675	.550 .9	.289-02
24	.12500	1.4370	47.000	.5521-01	.6391-01	.6942-01	.6942-01	.33.94	.2671	.550 .0	.1650-02
24	.12500	.37500	46.000	.5683-01	.6581-01	.7145-01	.7145-01	.33.94	.2670	.549 .9	.1699-02
24	.12500	2.2930	45.000	.1076-01	.1246-01	.1353-01	.1353-01	.33.92	.2675	.551 .0	.3216-03
24	.12500	.37500	55.000	.1668-01	.1930-01	.2095-01	.2095-01	.33.92	.2675	.550 .9	.4981-03
24	.12500	1.0640	54.000	.2175-01	.2518-01	.2734-01	.2734-01	.33.92	.2673	.550 .5	.6500-03
24	.12500	.62500	53.000	.3640-01	.4214-01	.4576-01	.4576-01	.33.95	.2668	.549 .4	.1088-02
24	.12500	1.4370	52.000	.3608-01	.4179-01	.4537-01	.4537-01	.33.93	.2674	.550 .4	.1079-02
24	.12500	.62500	51.000	.00000	.00000	.00000	.00000	.0000	.0000	.0000	.0000
24	.12500	.87500	62.000	.5686-02	.6586-02	.7151-02	.7151-02	.33.91	.2676	.561 .2	.1700-03
24	.12500	.69000	61.000	.8357-02	.9678-02	.1051-01	.1051-01	.33.92	.2675	.551 .0	.2456-03
24	.12500	.87500	60.000	.1252-01	.1450-01	.1575-01	.1575-01	.33.93	.2672	.560 .4	.3743-03
24	.12500	.87500	59.000	.00000	.00000	.00000	.00000	.0000	.0000	.0000	.0000
24	.12500	.69900	57.000	.00000	.00000	.00000	.00000	.0000	.0000	.0000	.0000

DATE 28 MAR 79

AMES OH58 HEATING AND PRESSURE DATA

PAGE 107

(R2XC24)

RUN NUMBER	Z	X	T/C NO	OH58 FUSELAGE/ELEVON-HEATING		FUSELAGE	QREF	QDOT BTU/ SEC	TH DEG. R	H/WHT	STN NO R=0.9
				H/HREF R=1.0	H/HREF R=0.9						
2 ¹	1.1250	.00000	68.000	.0000	.0000					.0000	.0000
2 ¹	1.1250	.69000	67.000	.3657-02	.4236-02	.4600-02	.33.90	.1240	.2679	.551.8	.1093-03
2 ¹	1.1250	1.0640	66.000	.4983-02	.5771-02	.6266-02	.33.91	.1689	.2678	.551.5	.1489-03
2 ¹	1.1250	1.4370	65.000	.7803-02	.9036-02	.9812-02	.33.92	.2647	.2675	.551.0	.2332-03
2 ¹	1.1250	2.2930	64.000	.1822-01	.2110-01	.2291-01	.33.93	.6183	.2672	.550.4	.5446-03
2 ¹	1.1250	2.6990	63.000	.1665-01	.1928-01	.2094-01	.33.93	.5650	.2673	.550.5	.4977-03
2 ¹	1.3750	.00000	74.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
2 ¹	1.3750	.69000	73.000	.2607-02	.3019-02	.3278-02	.33.89	.8834-01	.2681	.552.1	.7792-04
2 ¹	1.3750	1.0640	72.000	.2901-02	.3360-02	.3649-02	.33.90	.9835-01	.2679	.551.9	.6673-04
2 ¹	1.3750	1.4370	71.000	.5054-02	.5853-02	.6355-02	.33.92	.1714	.2675	.551.0	.1511-03
2 ¹	1.3750	2.2930	70.000	.1070-01	.1239-01	.1345-01	.33.93	.3629	.2674	.550.7	.3197-03
2 ¹	1.3750	2.6990	69.000	.1074-01	.1243-01	.1350-01	.33.93	.3643	.2673	.550.5	.3209-03

DATE 28 MAR 79 AMES OH58 HEATING AND PRESSURE DATA C160 SURFACE / E/F/ON-HEATING FUSELAGE

INTER CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	RN/FT /FT	PT PSIA	TT DEG. R	HT BTU/ LBM	PINF PSIA	TINF DEG. R	RHO SLUGS/ FT ³	VINF FT/SEC	SCALE
26	70.00	0000	7.300	.7608+06	288.6	1975.	497.5	.4977-01	177.9	.2348-04	4772.	.4000-01

TEST DATA

RUN NUMBER	Z	X	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	GREF BTU/ FT2SEC	QDOT BTU/ FT2SEC	TH DEG. R	STN NO R=0.9
26	.12500	.69000	43.000	.8931-01 .7595-01	.1035 .8917-01	.1124 .9686-01	.33.96 .33.97	.3.033 2.613	.2703 .2703	.560.4 .560.4
26	1.4370	41.000	42.000	.6731-01 .5809-01	.6731-01 .4058-01	.7311-01 .4070-01	.33.97 .33.99	1.973 1.190	.2700 .2698	.559.9 .559.4
26	.12500	2.2930	40.000	.3502-01 .3949-01	.4576-01 .2497-01	.4070-01 .2712-01	.33.99 .33.98	.2700 .2704	.559.8 .560.8	
26	.12500	2.6990	39.000	.2155-01 .69000	.2155-01 .2640-01	.2712-01 .33.95	.7316 .8954	.2704 .2705	.6480-03 .560.8	
26	.12500	2.2930	49.000	.2640-01 .37500	.3059-01 .3323-01	.3702-01 .33.95	.9987 .9987	.2703 .2703	.560.4 .560.4	
26	.12500	1.4370	47.000	.2941-01 .37500	.3408-01 .3408-01	.33.96 .33.96	1.988 1.988	.2701 .2701	.560.1 .560.1	
26	.12500	2.2930	46.000	.5854-01 .37500	.6783-01 .6312-01	.7368-01 .6312-01	.33.97 .33.97	.704 .704	.2701 .2701	.1508-02 .560.0
26	.12500	2.6990	45.000	.5015-01 .69000	.5811-01 .9701-02	.6312-01 .1054-01	.33.97 .33.96	.2843 .2843	.2702 .2702	.2517-03 .560.3
26	.12500	2.2930	55.000	.8372-02 .62500	.8372-02 .1494-01	.9701-02 .1494-01	.33.96 .33.96	.4379 .4379	.2702 .2702	.3877-03 .560.3
26	.12500	1.4370	54.000	.1289-01 .87500	.1289-01 .2112-01	.1447-01 .2447-01	.33.97 .33.97	.7175 .7175	.2700 .2700	.559.9 .559.9
26	.12500	2.2930	53.000	.53.000 .62500	.53.000 .4611-01	.2112-01 .5343-01	.33.97 .33.99	1.567 1.5803-01	.2696 .2696	.559.1 .559.1
26	.12500	2.6990	51.000	.3805-01 .00000	.4409-01 .00000	.4789-01 .00000	.33.97 .0000	.1.292 .0000	.2702 .0000	.560.2 .0000
26	.12500	2.2930	62.000	.00000 .87500	.00000 .4123-02	.00000 .4778-02	.0000 .5190-02	.0000 .1400	.0000 .2703	.0000 .560.6
26	.12500	1.4370	61.000	.69000 .87500	.69000 .6976-02	.6976-02 .8083-02	.33.96 .8781-02	.2369 .4177	.2703 .2700	.560.4 .559.9
26	.12500	2.2930	59.000	.00000 .87500	.00000 .1225-01	.00000 .1425-01	.33.97 .1547-71	.00000 .00000	.0000 .0000	.0000 .0000
26	.12500	2.6990	57.000	.00000 .87500	.00000 .00000	.00000 .00000	.00000 .00000	.00000 .00000	.0000 .0000	.0000 .0000

DATE 28 MAR 79

AMES OH58 HEATING AND PRESSURE DATA

PAGE 109
(R2XC25)

RUN NUMBER	Z	X	T/C NO	OH58 FUSelage/ELEVon+HEATING		FUSELAGE	H/HREF R=0.9	H/HREF R=0.85	QDOT BTU/FT2SEC	H/HIT	TH DEG. R	STN NO R=0.9
				H/HREF R=1.0	H/HREF R=0.9							
26	1.1250		.00000	68.000	.0000		.0000	.0000	.0000	.0000	.0000	.0000
26	1.1250		.69000	67.000	.2113-02	.2449-02	.2660-02	.33.94	.7172-01	.2706	.561.2	.6354-04
26	1.1250		1.0640	66.000	.4104-02	.4755-02	.5166-02	.33.95	.1393	.2705	.560.9	.1234-03
26	1.1250		1.4370	65.000	.6340-02	.7346-02	.7980-02	.33.96	.2153	.2702	.560.3	.1906-03
26	1.1250		2.2930	64.000	.1532-01	.1775-01	.1928-01	.33.98	.5204	.2700	.559.8	.4605-03
26	1.1250		2.6990	63.000	.1924-01	.1924-01	.2089-01	.33.97	.5640	.2700	.559.9	.4992-03
26	1.1250		3.750	74.000	.00000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
26	1.3750		.00000	73.000	.1015-02	.1177-02	.1278-02	.33.94	.3446-01	.2707	.561.4	.3054-04
26	1.3750		.69000	72.000	.2582-02	.2993-02	.3251-02	.33.94	.8765-01	.2706	.561.2	.7756-04
26	1.3750		1.0640	71.000	.4518-02	.4908-02	.5308-02	.33.96	.1324	.2703	.560.5	.1172-03
26	1.3750		1.4370	70.000	.9392-02	.1088-01	.1182-01	.33.97	.3191	.2700	.559.9	.2924-03
26	1.3750		2.2930	69.000	.9729-02	.1127-01	.1225-01	.33.98	.3306	.2699	.559.7	.2926-03

DATE 28 MAR 79

AMES 0H58 HEATING AND PRESSURE DATA

0H58 FUSELAGE/ELEVON-HEATING

FUSELAGE

FUSELAGE

	ALPHA = 30.00	BETA = 0.000	RNL = 1.000	MACH = 1.000	LENGTH = 14.40
ELEVON = .0000					

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	MACH	RNL/FT /FT	PT PSIA	TT DEG. R	HT BTU/LBM	PINF PSIA	TINF DEG. R	RHO SLUGS/FT ³	VINF FT/SEC	SCALE
25	30.00	.0000	7.300	.1031+07	389.5	1971.	496.2	.6720-01	177.4	.3179-04	4766.
RUN NUMBER	PHI DEG.										4000-01
25	.0000										

RUN NUMBER	ALPHA DEG.	MACH	RNL/FT /FT	PT PSIA	TT DEG. R	HT BTU/LBM	PINF PSIA	TINF DEG. R	RHO SLUGS/FT ³	VINF FT/SEC	SCALE
------------	------------	------	------------	---------	-----------	------------	-----------	-------------	---------------------------	-------------	-------

TEST DATA

RUN NUMBER	Z	X	T/C NO	H/HREF R=1.0	H/HREF R=0.9	GREF R=0.85	QDOT BTU/SEC	QDOT BTU/SEC	HHWT	TH DEG. R	STN NO R=0.9
25	12500	69000	43.000	1.340	1.553	.1686	39.44	5.286	.2687	555.8	.3462-02
25	12500	69000	42.000	1.446	1.675	.1819	39.44	5.702	.2688	555.9	.3735-02
25	12500	41.000	41.000	1.418	1.642	.1783	39.45	5.592	.2686	555.4	.3662-02
25	12500	2.2930	40.000	1.303	1.509	.1639	39.46	5.142	.2684	555.1	.3366-02
25	12500	2.6990	39.000	1.438	1.666	.1809	39.46	5.675	.2685	555.3	.3716-02
25	12500	69000	49.000	3688-01	4.273-01	.4640-01	39.43	1.454	.2689	556.0	.9528-03
25	37500	69000	49.000	4515-01	5.230-01	.5680-01	39.44	1.780	.2688	556.0	.1166-02
25	37500	1.0640	48.000	4749-01	.5502-01	.5975-01	39.45	1.873	.2686	555.6	.1227-02
25	37500	1.4370	47.000	.5503-01	6.374-01	.6922-01	39.45	2.171	.2685	555.3	.1422-02
25	37500	2.2930	46.000	.5550-01	6.428-01	.6981-01	39.46	2.190	.2684	555.1	.1434-02
25	37500	2.6990	45.000	.5500	1.309-01	.1647-01	39.45	5.165	.2687	555.6	.3382-03
25	62500	69000	55.000	1.967-01	.2279-01	.2475-01	39.45	.7761	.2686	555.6	.5083-03
25	62500	1.0640	54.000	.2485-01	.2879-01	.3126-01	39.46	.9807	.2684	555.1	.6420-03
25	62500	1.4370	53.000	.3562-01	.4125-01	.4480-01	39.48	1.406	.2581	554.5	.9201-03
25	62500	2.2930	52.000	.51.000	.343F-01	.3981-01	39.44	1.355	.2687	555.7	.8877-03
25	62500	2.6990	62.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
25	87500	69000	61.000	.6042-02	.7000-02	.7602-02	39.44	.2383	.2689	556.0	.1561-03
25	87500	1.0640	60.000	.1012-01	.1172-01	.1273-01	39.44	.3989	.2688	555.9	.2613-03
25	87500	1.4370	59.000	.1465-01	.1697-01	.1843-01	39.46	.5782	.2685	555.3	.3785-03
25	87500	2.2930	58.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
25	87500	2.6990	57.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000

DATE 28 MAR 79

AMES OH-58 HEATING AND PRESSURE DATA

OH-58 FUSELAGE/ELEVON+HEATING

RUN NUMBER	Z	X	Y/C NO	H/HREF		H/HREF		QREF R=0.9	QDOT BTU/ FT2SEC	H/HIT	TH DEG. R	STN NO R=0.9
				R=1.0	.0000	R=0.9	.0000					
25	1.1250	.00000	68.000	.4451-02	.5156-02	.5600-02	.39.41	.1754	.0000	.2693	.556.9	.1150-03
25	1.1250	.69000	67.000	.6815-02	.7401-02	.39.41	.2319	.2692	.0000	.2692	.556.7	.1520-03
25	1.1250	1.0640	66.000	.5882-02	.6865-02	.1083-01	.39.43	.3393	.0000	.2689	.556.0	.2223-03
25	1.1250	1.4370	65.000	.8605-02	.9968-02	.2281-01	.39.44	.7150	.0000	.2688	.555.8	.4683-03
25	1.1250	2.2930	64.000	.1813-01	.2100-01	.1948-01	.39.43	.6107	.0000	.2689	.556.0	.4001-03
25	1.1250	2.6990	63.000	.1549-01	.1794-01	.1948-01	.39.43	.6107	.0000	.2689	.556.0	.4001-03
25	1.1250	2.6990	74.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
25	1.3750	.00000	73.000	.4514-02	.5230-02	.5681-02	.39.39	.1778	.0000	.2696	.557.6	.1166-03
25	1.3750	.69000	72.000	.3255-02	.3887-02	.4222-02	.39.40	.1322	.0000	.2695	.557.4	.8669-04
25	1.3750	1.0640	71.000	.5662-02	.6559-02	.7124-02	.39.42	.2232	.0000	.2691	.556.6	.1463-03
25	1.3750	1.4370	70.000	.1106-01	.1281-01	.1391-01	.39.43	.4360	.0000	.2690	.556.2	.2857-03
25	1.3750	2.2930	69.000	.9778-02	.1133-01	.1230-01	.39.43	.3855	.0000	.2689	.556.2	.2526-03

PAGE 111
(R2XC26)

DATE 28 MAR 79

AMES OH58 HEATING AND PRESSURE DATA

OH58 FUSELAGE/ELEVON-HEATING

FUSELAGE

ALPHA = 30.00
ELEVON = 10.00

BETA = 0.000
RNL = 1.000

MACH = 7.300
HT = 7.300

BTU/LB/M = 1.000
MACH = 14.40

TEST CONDITIONS

RUN NUMBER	ALPHA DEG.	BETA DEG.	MACH	RN/FT /FT	PT PSIA	TT DEG. R	HT BTU LB/M	PINF PSIA	TINF DEG. R	RHO SLUGS/ FT ³	VINF FT/SEC	SCALE
29	30.00	.0000	7.300	.9799+06	393.6	2039.	515.1	.6744-01	184.2	.3073-04	4856.	.4000-01

RUN NUMBER PHI DEG.
HS SPHERE TH-540
.1093

TEST DATA

RUN NUMBER	Z	X	T/C NO	H/HREF R=1.0	H/HREF R=0.9	OREF R=0.85	QDOT BTU/FT ² SEC	HM/HT	TW DEG. R	STN NO R=0.9	
29	12500		43.000	.69000	.42.000	.124.7	.144.1	.156.3	.41.83	.25668	551.3
29	1.0640	1.4370	41.000	.69000	.41.000	.101.1	.116.9	.126.7	.41.83	.25668	551.4
29	12500	2.2930	40.000	.69000	.2.2930	.74.32-01	.8687-01	.9311-01	.41.84	.25666	550.9
29	1.2500	2.6990	39.000	.69000	.2.6990	.5203-01	.6128-01	.6645-01	.41.82	.25670	551.7
29	12500	3.7500	39.000	.69000	.3.7500	.3230-01	.3772-01	.4047-01	.41.82	.2570	551.7
29	1.0640	3.7500	48.000	.69000	.48.000	.3565-01	.4119-01	.4466-01	.41.82	.25669	551.6
29	1.4370	3.7500	47.000	.69000	.47.000	.4144-01	.4789-01	.5192-01	.41.83	.25668	551.4
29	1.2500	3.7500	46.000	.69000	.46.000	.6203-01	.7214-01	.7822-01	.41.83	.25668	551.4
29	2.2930	3.7500	45.000	.69000	.45.000	.5162-01	.5967-01	.6472-01	.41.70	.25689	555.9
29	2.6990	3.7500	55.000	.69000	.55.000	.1253-01	.1448-01	.1570-01	.41.82	.25669	551.5
29	3.7500	3.7500	54.000	.69000	.54.000	.1861-01	.2150-01	.2331-01	.41.82	.25669	551.5
29	1.0640	3.7500	53.000	.69000	.53.000	.2860-01	.3305-01	.3584-01	.41.83	.25665	550.8
29	1.4370	3.7500	52.000	.69000	.52.000	.4857-01	.5611-01	.6084-01	.41.84	.2571	551.9
29	1.2500	3.7500	51.000	.69000	.51.000	.3669-01	.4240-01	.4599-01	.41.81	.25668	551.3
29	2.2930	3.7500	62.000	.00000	.62.000	-.6093-03	-.7041-03	-.7634-03	41.83	.2572	.552.1
29	2.6990	3.7500	61.000	.69000	.61.000	.6266-02	.7240-02	.7851-02	.41.81	.2572	.552.1
29	3.7500	3.7500	60.000	.69000	.60.000	.8950-02	.1034-01	.1121-01	.41.81	.2571	.551.5
29	1.0640	3.7500	59.000	.69000	.59.000	.1563-01	.1806-01	.1958-01	.41.82	.00000	.00000
29	1.4370	3.7500	58.000	.69000	.58.000	.00000	.00000	.00000	.00000	.00000	.00000
29	2.2930	3.7500	57.000	.69000	.57.000	.00000	.00000	.00000	.00000	.00000	.00000

DATE 28 MAR 79

AMES OH5B HEATING AND PRESSURE DATA

OH5B FUSELAGE/ELEVON-HEATING

RUN NUMBER	Z	X	T/C NO	H/HREF		H/HREF		FUSELAGE		HT/HT	DEG. R	STN NO R=0.9
				R=1.0	R=0.9	R=0.95	R=0.95	QREF	BTU/ FT2SEC			
29	1.1250	.00000	68.000	.0000	.4303-02	.4973-02	.5392-02	.41.79	.0000	.0000	.0000	.0000
29	1.1250	.69000	67.000	.5163-02	.5967-02	.6470-02	.41.79	.1798	.2575	.552.8	.1132-03	
29	1.250	1.0640	66.000	.8557-02	.9888-02	.1072-01	.41.81	.2158	.2574	.552.6	.1358-03	
29	1.250	1.4370	65.000	.1697-01	.1961-01	.2126-01	.41.82	.3578	.2571	.552.0	.2250-03	
29	1.250	2.2930	64.000	.1619-01	.1871-01	.2028-01	.41.81	.7096	.2570	.551.8	.4462-03	
29	1.1250	2.6990	63.000	.2172-03	.2510-03	.2721-03	.41.78	.6768	.2571	.551.9	.4257-03	
29	1.3750	.00000	74.000	.2498-02	.2887-02	.3131-02	.41.77	.1044	.2576	.553.0	.5711-05	
29	1.3750	.69000	73.000	.3559-02	.4113-02	.4460-02	.41.78	.1487	.2578	.553.4	.6571-04	
29	1.3750	1.0640	72.000	.4372-02	.5746-02	.6230-02	.41.80	.2078	.2577	.553.1	.9360-04	
29	1.3750	1.4370	71.000	.1022-01	.1181-01	.1281-01	.41.81	.4274	.2573	.552.4	.1308-03	
29	1.3750	2.2930	70.000	.1031-01	.1192-01	.1292-01	.41.81	.4313	.2572	.552.1	.2688-03	
29	1.3750	2.6990	69.000						.2571	.551.9		

PAGE 113
(R2XC27)

DATE 28 MAR 79

AMES OH58 HEATING AND PRESSURE DATA

OH58 FUSELAGE/ELEVON-HEATING

FUSELAGE

FUSELAGE

ALPHA = 30.00 BETA = 0000
ELEVON = -10.00 R/N/L = 1.000

TEST CONDITIONS

RN/FT	PT PSIA	TT DEG. R	HT BTU/ LBM	PINF PSIA	TINF DEG. R	RHO SLUGS/ FT ³	VINF FT/SEC	SCALE
.9764+06	391.2	2036.	514.4	.6706-01	183.9	.3060-04	.4852.	.4000-01

RUN NUMBER PHI DEG.
35 .0000 HS SPHERE
35 .0000 Tw=540
35 .0000 1090

TEST DATA

RUN NUMBER	Z	X	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	OREF BTU/ FT ² SEC	000T BTU/ FT ² SEC	WT/HT	WT DEG. R	STN NO R=0.9	
35	12500		43.000	.69000	.69000	.69000	.1425	.1647	.1786	.41.54	.2586	554.4
35	12500		42.000	.69000	.69000	.69000	.1425	.1647	.1786	.41.53	.2588	554.9
35	12500		41.000	.69000	.69000	.69000	.1393	.1611	.1747	.41.54	.2586	554.5
35	12500		2.2930	.69000	.69000	.69000	.1149	.1329	.1441	.41.52	.2589	555.1
35	12500		2.6990	.69000	.69000	.69000	.1213	.1402	.1521	.41.49	.2595	556.3
35	12500		49.000	.69000	.69000	.69000	.5435-01	.6282-01	.6813-01	.41.54	.2586	554.4
35	12500		48.000	.69000	.69000	.69000	.8245-01	.9531-01	.1037	.41.53	.2587	554.6
35	1.0640						.1095	.1266	.1373	.41.54	.2586	554.4
35	1.4370						.1052	.1910	.2072	.41.53	.2588	554.7
35	2.2930						.1797	.2079	.2255	.41.34	.2619	561.6
35	2.6990						.1706-01	.1972-01	.2139-01	.41.56	.2582	553.6
35	62500						.2230-01	.2577-01	.2795-01	.41.56	.2583	553.7
35	62500						.2869-01	.3316-01	.3536-01	.41.57	.2581	553.3
35	62500						.5960-01	.6888-01	.7469-01	.41.59	.2578	552.8
35	62500						.7962-01	.9203-01	.9980-01	.41.56	.2583	553.8
35	62500						.0000	.0000	.0000	.0000	.0000	.0000
35	62500						.0000	.0000	.0000	.0000	.0000	.0000
35	62500						.8504-02	.9829-02	.1056-01	.41.55	.2584	554.0
35	62500						.69000	.61.000	.1100-01	.1272-01	.4572	.2583
35	62500						.60.000	.52.000	.1727-01	.1995-01	.7179	.2580
35	62500						.59.000	.51.000	.0000	.0000	.0000	.0000
35	62500						.58.000	.57.000	.0000	.0000	.0000	.0000

DATE 28 MAR 79

AMES 0458 HEATING AND PRESSURE DATA

0458 FUSELAGE/ELEVON-HEATING

FUSELAGE

RUN NUMBER	Z	X	T/C NO	H/HREF R=1.0	H/HREF R=0.9	QREF BTU/ FT ² SEC	QDOT BTU/ FT ² SEC	HW/HT	TW DEG. R	STN NO R=0.9
35	1.1250	.00000	68.000	.00000	.5982-.02	.6915-.02	.7500-.02	41.54	.2485	.2587
35	1.1250	.69000	67.000	.00000	.6881-.02	.7954-.02	.8626-.02	41.55	.2859	.554.1
35	1.1250	1.0640	66.000	.00000	.1217-.01	.1407-.01	.1526-.01	41.57	.5059	.2581
35	1.1250	1.4370	65.000	.00000	.2376-.01	.2745-.01	.2977-.01	41.59	.9879	.2578
35	1.1250	2.2930	64.000	.00000	.2469-.01	.2853-.01	.3094-.01	41.59	1.027	.2578
35	1.1250	2.6990	63.000	.00000	.00000	.00000	.00000	.0000	.0000	.6507-.03
35	1.3750	.00000	74.000	.00000	.4689-.02	.5420-.02	.5879-.02	41.52	.1947	.2589
35	1.3750	.69000	73.000	.00000	.4080-.02	.4716-.02	.5115-.02	41.53	.1695	.2587
35	1.3750	1.0640	72.000	.00000	.8285-.02	.9576-.02	.1039-.01	41.56	.3444	.2582
35	1.3750	1.4370	71.000	.00000	.1587-.01	.1834-.01	.1989-.01	41.58	.6600	.2579
35	1.3750	2.2930	70.000	.00000	.1521-.01	.1758-.01	.1906-.01	41.59	.6325	.2578
35	1.3750	2.6990	69.000	.00000					.4008-.03	.552.7

PAGE 115
(REXC28)

DATE 28 MAR 79

AMES 0458 HEATING AND PRESSURE DATA

0458 FUSelage/ELEVon-HEATING

FUSELAGE

FUSELAGE

PARAMETRIC DATA

ALPHA =	30.00	BETA =	0.0000
ELEVON =	.0000	RN/L =	1.500

LENGTH = 14.40

TEST CONDITIONS

RN/FT	PT	HT	PINF	TINF	RHO	VINF	SCALE
/FT	PSIA	DEG. R	PSIA	DEG. R	SLUGS/	FT/SEC	
					F13		
.1563+07	576.7	1945.	489.2	.9974-01	174.9	.4786-04	.4000-01

RUN NUMBER	PHI DEG.	HS SPHERE	TH=540	
23	.0000	.1324		

TEST DATA

RUN NUMBER	Z	X	T/C NO	H/HREF R=1.0	H/HREF R=0.9	H/HREF R=0.85	OREF FT2SEC	O00T FT2SEC	H/HFT	TH DEG. R	STN NO R=0.9
23	12500	.69000	43.000	.1332	.1542	.1674	47.51	6.328	.2661	542.4	.2801-02
23	12500	1.0640	42.000	.1432	.1658	.1801	47.49	6.803	.2663	543.0	.3012-02
23	12500	1.4370	41.000	.1408	.1630	.1770	47.51	6.690	.2660	542.4	.2961-02
23	12500	2.2930	40.000	.1149	.1330	.1444	47.51	5.458	.2661	542.6	.2416-02
23	12500	2.6990	39.000	.1369	.1585	.1721	47.48	6.501	.2665	543.3	.2879-02
23	12500	2.6990	49.000	.3634-01	.4208-01	.4568-01	47.51	1.727	.2660	542.4	.7642-03
23	12500	1.0640	48.000	.4506-01	.5218-01	.5664-01	47.50	2.141	.2662	542.7	.9476-03
23	12500	1.4370	47.000	.4671-01	.5408-01	.5871-01	47.51	2.219	.2660	542.4	.9822-03
23	12500	2.2930	46.000	.5182-01	.6000-01	.6514-01	47.50	2.461	.2663	542.9	.1090-02
23	12500	2.6990	45.000	.5287-01	.6121-01	.6646-01	47.49	2.510	.2665	543.4	.1112-02
23	12500	2.6990	55.000	.1279-01	.1481-01	.1608-01	47.53	.6080	.2659	542.0	.2690-03
23	62500	1.0640	54.000	.1968-01	.2279-01	.2474-01	47.52	.9353	.2660	542.2	.4139-03
23	62500	1.4370	53.000	.2379-01	.2754-01	.2990-01	47.53	1.131	.2658	542.0	.5002-03
23	62500	2.2930	52.000	.3363-01	.3893-01	.4226-01	47.51	1.598	.2661	542.4	.7071-03
23	62500	2.6990	51.000	.3201-01	.3706-01	.4024-01	47.46	1.519	.2669	544.1	.6731-03
23	62500	2.6990	62.000	.1327-03	.1536-03	.1668-03	47.53	.6307-02	.2658	541.9	.2790-05
23	87500	.69000	61.000	.6168-02	.7141-02	.7753-02	47.50	.2930	.2662	542.7	.1297-03
23	87500	1.0640	60.000	.9876-02	.1143-01	.1241-01	47.50	.4692	.2662	542.7	.2077-03
23	87500	1.4370	59.000	.1386-01	.1604-01	.1741-01	47.51	.6583	.2661	542.5	.2913-03
23	87500	2.2930	58.000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
23	87500	2.6990	57.000	.2444-01	.2830-01	.3072-01	47.46	1.160	.2669	544.1	.6139-03

DATE 28 MAR 79

AMES OH58 HEATING AND PRESSURE DATA

PAGE 117
(R2XC29)

RUN NUMBER	Z	X	T/C NO	OH58 FUSELAGE/ELEVON-HEATING		FUSELAGE	H/H REF R=0.9	H/H REF R=0.85	O/H REF F12SEC	O/H REF F12SEC	H/H HT DEG. R	H/H HT DEG. R	STN NO R=0.9
				H/H REF R=1.0	H/H REF R=0.9								
23	1.1250	.00000	68.000	-.3557-03	-4.118-03	-.4471-03	47.48	47.48	-.1689-01	.2665	543.3	-.7480-05	
23	1.1250	.69000	67.000	.3998-02	.4050-02	.4357-02	47.46	47.46	.1680	.2669	544.0	.7356-04	
23	1.1250	1.0640	66.000	.5428-02	.6225-02	.6824-02	47.46	47.46	.2576	.2668	543.8	.1141-03	
23	1.1250	1.4370	65.000	.7889-02	.9135-02	.9917-02	47.48	47.48	.3746	.2665	543.2	.1659-03	
23	1.1250	2.2930	64.000	.1775-01	.2055-01	.2231-01	47.45	47.45	.8422	.2669	544.1	.3732-03	
23	1.1250	2.6990	63.000	.1562-01	.1809-01	.1969-01	47.42	47.42	.7407	.2674	545.2	.3285-03	
23	1.1250	2.6990	63.000	.7968-03	.9228-03	.1002-02	47.43	47.43	-.3779-01	.2673	544.9	.1675-04	
23	1.3750	.00000	74.000	-.7968-03	-.9228-03	-.1002-02	47.42	47.42	.1828	.2674	545.2	.8106-04	
23	1.3750	.69000	73.000	.3684-02	.4463-02	.4846-02	47.42	47.42	.3574-02	.2673	544.9	.5979-04	
23	1.3750	1.0640	72.000	.2813-02	.3292-02	.3574-02	47.43	47.43	.1348	.2669	544.1	.1026-03	
23	1.3750	1.4370	71.000	.4877-02	.5619-02	.6132-02	47.45	47.45	.2315	.2673	544.8	.2377-03	
23	1.3750	2.2930	70.000	.1130-01	.1309-01	.1421-01	47.43	47.43	.5361	.2675	545.3	.2069-03	
23	1.3750	2.6990	69.000	.9838-02	.1139-01	.1237-01	47.42	47.42	.4665	.2675			

AMES CH58 HEATING AND PRESSURE DATA

EATING AND PRESSURE DATA OVER SUCSESSIVE HEATINGS

FUSELAGE

ALPHA = 30.00 ELEVON = 10.00 BETA = .0000 RNL = 1.500 MACH = 7.300 LENGTH = 14.40

PN/FT /FT	PT PSIA	TT DEG. R	HT BTU/ LBH	PINF PSIA	TINF DEG. R	RHO SLUGS/ FT ³	VINF FT/SEC	SCALE
1482+07	581.0	2912.	507.6	.9984-01	181.5	.4617-04	4820.	.4000-01

RUN NUMBER	PHI DEG.	HS SPHERE TW=540	HS SPHERE TW=1328
27	.0000		

TEST DATA

DATE 28 MAR 79

AMES OH-58 HEATING AND PRESSURE DATA

OH-58 FUSELAGE/ELEVON-HEATING

RUN NUMBER	Z	X	T/C NO	H/HREF		H/HREF		FUSelage		TW DEG. R	STN NO R=0.9
				R=1.0	R=0.9	R=0.85	R=0.85	000T BTU/ FT2SEC	000T BTU/ FT2SEC		
27	1.1250	.00000	69.000	.00000	.4330-02	.4698-02	.49.81	.0000	.2609	.552.0	.0000
27	1.1250	.69000	67.000	.3744-02	.5181-02	.5621-02	.49.80	.2231	.2609	.552.0	.9608-04
27	1.1250	1.0640	66.000	.4480-02	.7105-02	.8217-02	.8914-02	.3540	.2608	.551.6	.1524-03
27	1.1250	1.4370	65.000	.7105-02	.1558-01	.1802-01	.1955-01	.49.81	.7762	.2609	.551.8
27	1.1250	2.2930	64.000	.1558-01	.1533-01	.1773-01	.1924-01	.49.79	.7635	.2611	.3289-03
27	1.1250	2.6990	63.000	.1533-01	.00000	.00000	.0000	.0000	.0000	.552.4	.0000
27	1.3750	.00000	74.000	.2525-02	.2920-02	.3168-02	.49.77	.1257	.2614	.552.9	.5415-04
27	1.3750	.69000	73.000	.2331-02	.2696-02	.2925-02	.49.78	.1160	.2613	.552.9	.4999-04
27	1.3750	1.0640	72.000	.4369-02	.5746-02	.6234-02	.49.81	.2475	.2609	.551.8	.1066-03
27	1.3750	1.4370	71.000	.9819-02	.1136-01	.1232-01	.49.80	.4890	.2610	.552.2	.2106-03
27	1.3750	2.2930	70.000	.1048-01	.1212-01	.1315-01	.49.79	.5217	.2611	.552.3	.2247-03
27	1.3750	2.6990	69.000	.1048-01	.00000	.00000	.0000	.0000	.0000	.552.1	.0000

PAGE 119
(R2XC30)

DATE 28 MAR 79

AMES OH58 HEATING AND PRESSURE DATA

OH58 FUSELAGE/ELEVON-HEATING

PAGE 121
(R2XC31)

RUN NUMBER	Z	X	T/C NO	FUSELAGE		H/H/HT	DEG. R	STN NO R=0.9
				H/H/REF R=1.0	H/H/REF R=0.9	QREF BTU/FT ² SEC	QDT BTU/FT ² SEC	
36	1.1250	.00000	68.000	.0000	.6456-02	.6996-02	.52.39	.2929
36	1.1250	.69000	67.000	.0000	.5942-02	.6860-02	.52.39	.3113
36	1.1250	1.0640	66.000	.0000	.1137-01	.1312-01	.52.42	.5958
36	1.1250	1.4370	65.000	.0000	.2326-01	.2685-01	.52.41	.2119
36	1.1250	2.2930	64.000	.0000	.2507-01	.2894-01	.52.39	.3113
36	1.1250	2.6990	63.000	.0000	.0000	.0000	.0000	.0000
36	1.3750	.00000	74.000	.0000	.4507-02	.5204-02	.5640-02	.2359
36	1.3750	.69000	73.000	.0000	.3449-02	.3982-02	.4316-02	.1805
36	1.3750	1.0640	72.000	.0000	.7024-02	.8109-02	.8788-02	.2534
36	1.3750	1.4370	71.000	.0000	.1587-01	.1832-01	.1986-01	.3680
36	1.3750	2.2930	70.000	.0000	.1550-01	.1789-01	.1939-01	.8316
36	1.3750	2.6990	69.000	.0000				.2527

DATE 03 APR 79

AMES OH5B HEATING AND PRESSURE DATA

0458 ELEVON/ELEVON-PRESURES

ELEVON

RUN NUMBER	RM/FT	MACH	QINF PSI	PINF PSI	TINF DEG. R	PTA PSIA	TTAV DEG. R	BETA RN/L	ELEVON = .0000	ALPHA = 30.00	MACH = .5000	PARAMETRIC DATA
46	.4816+06	7.300	1.255	.3364-01	186.1	196.7	2058.	.1188-01	30.00	.0000	.0000	LENGTH = 7.800

TEST CONDITIONS

RUN NUMBER	VINF FT/SEC	RUN NUMBER	DIM DUMMY	TAP NO	P PSIA	CP	P/PINF	P/PT	P/PT2
46	4881.			101.00	16905	1079	5.026	.8595-03	.7238-01
46		46		102.00	15618	.9766-01	4.643	.7940-03	.6686-01
46		46		103.00	10457	.5653-01	3.109	.5317-03	.4477-01
46		46		104.00	14776	.9095-01	4.393	.7512-03	.6326-01
46		46		105.00	66116-01	.2588-01	1.966	.3362-03	.2831-01
46		46		106.00	28876-01	.3795-02	.8584	.1468-03	.1236-01
46		46		107.00	13476	.8059-01	4.006	.6852-03	.5770-01
46		46		108.00	46209-01	.1002-01	1.374	.2349-03	.1978-01
46		46		109.00	13433-01	.1610-01	.3993	.6830-04	.5751-02
46		46		110.00	11723	.6662-01	3.485	.5960-03	.5019-01
46		46		111.00	25372-01	.6587-02	.7543	.1290-03	.1086-01
46		46		112.00	.68090-03	.2735-01	.2024-01	-.3462-05	-.2915-03
46		46		113.00	49580-02	-.3076-01	1.474	-.2521-04	-.2123-02
46		46		114.00	.23129	.1575	6.876	-.1176-02	.9902-01
46		46		115.00	37462-02	-.2979-01	-1.116	-.1905-04	-.1604-02
46		46		116.00	.85392-02	-.3361-01	-.6539	-.4342-04	-.3656-02
46		46		117.00	.92652-03	-.2607-01	.2754-01	.4711-05	.3967-03
46		46		118.00	11448-01	-.3593-01	-.3403	-.5821-04	-.4901-02
46		46		119.00	.06275-02	-.1993-01	.2565	-.4386-04	-.3694-02
46		46		120.00	23568-02	-.2492-01	.7036-01	-.1203-04	-.1013-02
46		46		121.00	.31676	.2256	9.417	.1610-02	.1356

TEST DATA

RUN NUMBER	DIM DUMMY	TAP NO	P PSIA	CP	P/PINF	P/PT	P/PT2
46	1.0000	101.00	16905	1079	5.026	.8595-03	.7238-01
46	1.0000	102.00	15618	.9766-01	4.643	.7940-03	.6686-01
46	1.0000	103.00	10457	.5653-01	3.109	.5317-03	.4477-01
46	1.0000	104.00	14776	.9095-01	4.393	.7512-03	.6326-01
46	1.0000	105.00	66116-01	.2588-01	1.966	.3362-03	.2831-01
46	1.0000	106.00	28876-01	.3795-02	.8584	.1468-03	.1236-01
46	1.0000	107.00	13476	.8059-01	4.006	.6852-03	.5770-01
46	1.0000	108.00	46209-01	.1002-01	1.374	.2349-03	.1978-01
46	1.0000	109.00	13433-01	.1610-01	.3993	.6830-04	.5751-02
46	1.0000	110.00	11723	.6662-01	3.485	.5960-03	.5019-01
46	1.0000	111.00	25372-01	.6587-02	.7543	.1290-03	.1086-01
46	1.0000	112.00	.68090-03	.2735-01	.2024-01	-.3462-05	-.2915-03
46	1.0000	113.00	49580-02	-.3076-01	1.474	-.2521-04	-.2123-02
46	1.0000	114.00	.23129	.1575	6.876	-.1176-02	.9902-01
46	1.0000	115.00	37462-02	-.2979-01	-1.116	-.1905-04	-.1604-02
46	1.0000	116.00	.85392-02	-.3361-01	-.6539	-.4342-04	-.3656-02
46	1.0000	117.00	.92652-03	-.2607-01	.2754-01	.4711-05	.3967-03
46	1.0000	118.00	11448-01	-.3593-01	-.3403	-.5821-04	-.4901-02
46	1.0000	119.00	.06275-02	-.1993-01	.2565	-.4386-04	-.3694-02
46	1.0000	120.00	23568-02	-.2492-01	.7036-01	-.1203-04	-.1013-02
46	1.0000	121.00	.31676	.2256	9.417	.1610-02	.1356

DATE 03 APR 79

AMES CH58 HEATING AND PRESSURE DATA

CH58 ELEVON/ELEVON-PRESSURES

RUN NUMBER	DIM DUMMY	TAP NO	P PSIA	CP	ELEVON	P/PINF	P/PT	P/PT2
46	1.0000	122.00	.44381	.3269	13.19	.2255-.02	.1900	
46	1.0000	123.00	.46746	.3457	13.90	.2377-.02	.2001	
46	1.0000	124.00	.52203	.3892	15.52	.2654-.02	.2235	
46	1.0000	125.00	.55036	.4118	16.36	.2798-.02	.2356	
46	1.0000	126.00	.00000	.0000	.0000	.0000	.0000	

PAGE 123
(REX032)

DATE 03 APR 79

AMES OH5B HEATING AND PRESSURE DATA

OH5B ELEVON/ELEVON-PRESURES

PAGE 124

(R2XD33)

ELEVON

RUN NUMBER	RN/FT /FT	MACH	QINF PSI	PINF PSI	TINF DEG. R	PT INF DEG. R	TTAV DEG. R	PT2PT1	ALPHA DEG.	BETA DEG.	PHI DEG.	RHO SLUGS/ FT ³
49	.5016+06	7.300	1.243	.3332-01	179.8	193.6	1995.	.1195-01	30.00	.0000	.0000	.1555-04

RUN NUMBER	RN/SEC	VINF FT/SEC	49	4797.
------------	--------	-------------	----	-------

TEST CONDITIONS

ALPHA = 30.00	BETA = .0000	ELEVON = 5.000	RN/L = .50000	PARAMETRIC DATA
				LENGTH = 7.800

TEST DATA

RUN NUMBER	DIM DUMMY	TAP NO	P PSI	CP	P/PINF	P/PT	P/PT2
49	1.0000	101.00	.22158	.1515	6.650	.1145-02	.9580-01
49	1.0000	102.00	.24252	.1683	7.278	.1253-02	.1048
49	1.0000	103.00	.1647	.1071	4.996	.8599-03	.7197-01
49	1.0000	104.00	.24023	.1665	7.210	.1241-02	.1039
49	1.0000	105.00	.12821	.7634-01	3.848	.6623-03	.5543-01
49	1.0000	106.00	.73087-01	.3199-01	2.193	.3775-03	.3160-01
49	1.0000	107.00	.21539	.1465	6.464	.1113-02	.9312-01
49	1.0000	108.00	.94096-01	.4889-01	2.824	.4861-03	.4068-01
49	1.0000	109.00	.40083-01	.5440-02	1.203	.2070-03	.1733-01
49	1.0000	110.00	.19271	.1282	5.784	.9955-03	.8332-01
49	1.0000	111.00	.66824-01	.2695-01	2.005	.3452-03	.2889-01
49	1.0000	112.00	.29185-01	.3327-02	.8759	.1508-03	.1262-01
49	1.0000	113.00	.18425-01	.1198-01	.5529	.9517-04	.7965-02
49	1.0000	114.00	.23332	.1609	7.002	.1205-02	.1009
49	1.0000	115.00	.16968-01	.1316-01	.5092	.8765-04	.7336-02
49	1.0000	116.00	.13273-01	.1613-01	.3983	.6856-04	.5738-02
49	1.0000	117.00	.23053-01	.8261-02	.6918	.1191-03	.9967-02
49	1.0000	118.00	.82861-02	.2014-01	.2487	.4280-04	.3582-02
49	1.0000	119.00	.27194-01	.4930-02	.8161	.1405-03	.1176-01
49	1.0000	120.00	.27578-01	.4621-02	.8276	.1425-03	.1192-01
49	1.0000	121.00	.29943	.2141	.8.986	.1547-02	.1295

DATE 03 APR 79

AMES OH5B HEATING AND PRESSURE DATA

PAGE 125
(R2XD33)

RUN NUMBER	DIM DUMMY	OH5B ELEVON/ELEVON-PRESSURES			ELEVON	P/PINF	P/PT	P/PT2
		TAP NO	P	CP				
49	1.0000	122.00	.65405	.4994	19.63	.3379-02	.2828	
49	1.0000	123.00	.68302	.5227	20.50	.3528-02	.2953	
49	1.0000	124.00	.74965	.5763	22.50	.3872-02	.3241	
49	1.0000	125.00	.78539	.6050	23.57	.4057-02	.3395	
49	1.0000	126.00	.00000	.0000	.0000	.0000	.0000	

DATE 03 APR 79

AMES OH5B HEATING AND PRESSURE DATA

(R2XD34)

PAGE 126

OH5B ELEVON/ELEVON-PRESURES

ELEVON

ALPHA = 30.00
ELEVON = -10.00ELEVON
RNL = .5000

PARAMETRIC DATA

MACH = .0000
RNL = .5000

LENGTH = 7.800

TEST CONDITIONS

RUN NUMBER	RN/FT	MACH	QINF PSI	PINF PSI A	TINF DEG. R	PTA	TIAV DEG. R	PTEPTI	ALPHA DEG.	BETA DEG.	PHI DEG.	RHO SUGS/ FT3
54	.5043+06	7.300	1.234	.3399-01	178.3	192.0	1980.	.1196-01	30.00	.0000	.0000	.1558-04

RUN NUMBER	VINF FT/SEC	RUN NUMBER	VINF FT/SEC
54	4777.		

TEST DATA

RUN NUMBER	DIM DUMMY	TAP NO	P PSI A	CP	P/PINF	P/PT	P/PT2
54	1.0000	101.00	.64888-01	.2578-01	1.961	.3380-03	.2825-01
54	1.0000	102.00	.66228-01	.2681-01	2.001	.3450-03	.2883-01
54	1.0000	103.00	.38151-01	.4099-02	1.153	.1987-03	.1661-01
54	1.0000	104.00	.51613-01	.1500-01	1.560	.2689-03	.2247-01
54	1.0000	105.00	.18796-01	-.1158-01	.5680	.9791-04	.8183-02
54	1.0000	106.00	.72502-02	-.2093-01	.2191	.3777-04	.3156-02
54	1.0000	107.00	.52918-01	.1609-01	1.600	.2758-03	.2305-01
54	1.0000	108.00	.13529-01	-.1585-01	.4088	.7047-04	.5890-02
54	1.0000	109.00	.3582-02	-.239-01	.1082	.1866-04	.1560-02
54	1.0000	110.00	.49083-01	.1295-01	1.483	.2557-03	.2137-01
54	1.0000	111.00	.44960-02	-.2317-01	1.359	.2342-04	.1957-02
54	1.0000	112.00	-.65735-02	-.3213-01	-.1986	-.3424-04	-.2862-02
54	1.0000	113.00	-.70540-02	-.3253-01	-.2135	-.3680-04	-.3075-02
54	1.0000	114.00	.33670	.2460	10.17	.1754-02	.1466
54	1.0000	115.00	.68369-01	.2858-01	2.066	.3561-03	.2977-01
54	1.0000	116.00	-.83434-02	-.3357-01	-.2521	-.4346-04	-.3632-02
54	1.0000	117.00	.30397-03	-.2656-01	.9186-02	.1583-05	.1323-03
54	1.0000	118.00	-.14351-01	-.3843-01	-.4337	-.7476-04	-.6248-02
54	1.0000	119.00	.67628-02	-.2133-01	.2044	.3523-04	.2944-02
54	1.0000	120.00	.39054-02	-.2372-01	1.150	.1982-04	.1657-02
54	1.0000	121.00	.32951	.2401	9.958	.1716-02	.1435

DATE 03 APR 79

AMES OH5B HEATING AND PRESSURE DATA

OH5B ELEVON/ELEVON-PRESSURES

PAGE 127
(R2X034)

RUN NUMBER	DIM DUMMY	TAP NO	P PSIA	CP	ELEVON	P/PINF	P/PT	P/PT2
54	1.0000	122.00	.18673	.1245	5.643	.9727-03	.8130-01	
54	1.0000	123.00	.20141	.1364	6.086	.1049-02	.8769-01	
54	1.0000	124.00	.22075	.1520	6.671	.1150-02	.9611-01	
54	1.0000	125.00	.24734	.1736	7.475	.1288-02	.1077	
54	1.0000	126.00	.00000	.00000	.00000	.00000	.00000	

DATE 03 APR 79

AMES OH58 HEATING AND PRESSURE DATA

OH58 ELEVON/ELEVON-PRESURES

ELEVON

RUN NUMBER	RN/FT /FT	MACH	Q INF PSI	P INF PSI A	T INF DEG. R	P TPSA	T TAV DEG. R	BETA RN/L	0.000	MACH	7.300	LENGTH = 7.800
47	.7225+06	7.300	1.856	.4976-01	184.3	290.4	2040.	.1190-01	30.00	.0000	.0000	

TEST CONDITIONS

RUN NUMBER	V INF FT/SEC	ELEVON	ALPHA = 30.00	ELEVON = .0000	BETA RN/L	0.000	MACH	7.300	LENGTH = 7.800
47	4857.								

47 4857.

TEST DATA

RUN NUMBER	DIM DUMMY	TAP NO	P PSI A	CP	P/P INF	P/PT	P/PT2
47	1.0000	101.00	.25963	.1104	5.117	.8768-03	.7370-01
47	1.0000	102.00	.26588	.1164	5.343	.9155-03	.7696-01
47	1.0000	103.00	.18134	.70889-01	3.644	.6244-03	.5219-01
47	1.0000	104.00	.25757	.1120	5.177	.88669-03	.7456-01
47	1.0000	105.00	.13422	.4551-01	2.698	.4622-03	.3888-01
47	1.0000	106.00	.7246-01	.1223-01	1.456	.2495-03	.2098-01
47	1.0000	107.00	.23844	.1017	4.792	.8211-03	.6902-01
47	1.0000	108.00	.10435	.2941-01	2.097	.3593-03	.3020-01
47	1.0000	109.00	.49952-01	.1044-03	1.004	.1720-03	.1446-01
47	1.0000	110.00	.20586	.840-01	1.137	.70889-03	.5959-01
47	1.0000	111.00	.66624-01	.9087-02	1.339	.2291-03	.1928-01
47	1.0000	112.00	.30447-01	-.1040-01	.6119	.1049-03	.8813-02
47	1.0000	113.00	.30804-01	-.1021-01	.6191	.1061-03	.8916-02
47	1.0000	114.00	.40465	.1912	8.132	.1393-02	.1171
47	1.0000	115.00	.30942-01	-.1014-01	.6218	.1065-03	.8956-02
47	1.0000	116.00	.22901-01	-.1447-01	.4602	.7886-04	.6629-02
47	1.0000	117.00	.31053-01	-.1009-01	.6241	.1069-03	.8989-02
47	1.0000	118.00	.13205-01	-.1969-01	.2654	.4547-04	.3822-02
47	1.0000	119.00	.38317-01	-.6164-02	.7701	.1319-03	.1109-01
47	1.0000	120.00	.34200-01	-.8382-02	.6873	.1179-03	.9899-02
47	1.0000	121.00	.47178	.2274	9.482	.1625-02	.1366

DATE 03 APR 79

AMES OH58 HEATING AND PRESSURE DATA

OH58 ELEVON/ELEVON-PRESSESRES

RUN NUMBER	DIM DUMMY	OH58 ELEVON/ELEVON-PRESSESRES			ELEVON		
		TAP NO	P PSIA	CP	P/P INF	P/PT	P/P12
47	1.0000	122.00	.69011	.3450	13.87	.2376-02	.1998
47	1.0000	123.00	.72055	.3614	14.48	.2481-02	.2086
47	1.0000	124.00	.80517	.4070	16.18	.2773-02	.2331
47	1.0000	125.00	.84214	.4269	16.92	.2900-02	.2439
47	1.0000	126.00	.00000	.00000	.0000	.00000	.0000

PAGE 129
(R2XD35)

DATE 03 APR 79

AMES 0458 HEATING AND PRESSURE DATA

0458 ELEVON/ELEVON-PRESSURES

ELEVON

	RN/FT /FT	MACH	QINF PSIA	PINF PSIA	ALPHA = 30.00	BETA RN/L	.0000 MACH	7.300 LENGTH = 7.800
ELEVON					5.000	.7500		

TEST CONDITIONS

RUN NUMBER	RN/FT /FT	MACH	QINF PSIA	PINF PSIA	TINF DEG. R	PT PSIA	TTAV DEG. R	PT2PT1	ALPHA DEG.	BETA DEG.	PHI DEG.	RHO SLUGS/ FT ³
50	.7776+06	7.300	1.912	.5125-01	178.8	297.5	1985.	.1196-01	30.00	.0000	.0000	.2405-04

RUN NUMBER	VINF FT/SEC
50	4785.

TEST DATA

RUN NUMBER	DIM DUMMY	TAP NO	P PSIA	C P	P/PINF	P/PT	P/PT2
50	1.0000	101.00	.34093	.1515	6.653	.1146-02	.9584-01
50	1.0000	102.00	.37602	.1699	7.337	.1264-02	.1057
50	1.0000	103.00	.25274	.1054	.932	.8497-03	.7105-01
50	1.0000	104.00	.37936	.1716	7.402	.1275-02	.1066
50	1.0000	105.00	.20149	.7859-01	3.932	.6774-03	.5664-01
50	1.0000	106.00	.10806	.2972-01	2.109	.3633-03	.3038-01
50	1.0000	107.00	.33952	.1508	6.625	.1141-02	.9544-01
50	1.0000	108.00	.14822	.5073-01	2.892	.4983-03	.4167-01
50	1.0000	109.00	.61687-01	.5461-02	1.204	.2074-03	.1734-01
50	1.0000	110.00	.30383	.1321	5.929	.1021-02	.8541-01
50	1.0000	111.00	.59442-01	.2521-01	1.940	.3343-03	.2795-01
50	1.0000	112.00	.35200-01	.8395-02	.6869	.1183-03	.9895-02
50	1.0000	113.00	.28740-01	.1177-01	.5608	.9662-04	.8079-02
50	1.0000	114.00	.41581	.1907	8.114	.1398-02	.1169
50	1.0000	115.00	.24973-01	.1374-01	.4873	.8396-04	.7020-02
50	1.0000	116.00	.14921-01	.1900-01	.2911	.5016-04	.4194-02
50	1.0000	117.00	.23350-01	.1459-01	.4556	.7850-04	.6564-02
50	1.0000	118.00	.10490-01	.2132-01	.2047	.3527-04	.2949-02
50	1.0000	119.00	.33546-01	.9260-02	.6546	.1128-03	.9430-02
50	1.0000	120.00	.27793-01	.1227-01	.5423	.9344-04	.7813-02
50	1.0000	121.00	.44250	.2047	8.634	.1488-02	.1244

DATE 03 APR 79

AMES 045B HEATING AND PRESSURE DATA

045B ELEVON/ELEVON-PRESSURES

PAGE 131
(R2XD36)

RUN NUMBER	DIM DUMMY	TAP NO	P PSIA	CP	ELEVON P/PINF	P/PT	P/PT2
50	1.0000	122.00	.99852	.4955	19.48	.3357-.02	.2807
50	1.0000	123.00	1.0490	.5219	20.47	.3526-.02	.2949
50	1.0000	124.00	1.1696	.5850	22.82	.3932-.02	.3289
50	1.0000	125.00	1.2115	.6069	23.64	.4073-.02	.3406
50	1.0000	126.00	.00000	.00000	.0000	.0000	.0000

DATE 03 APR 79

AMES OH-58 HEATING AND PRESSURE DATA

OH-58 ELEVON/ELEVON-PRESSES

ELEVON

RUN NUMBER	RN/FT /FT	MACH	QINF PSI	PINF PSI	TINF DEG. R.	PI PSIA	TTAV DEG. R	BETA RN/L	ELEVON	PARAMETRIC DATA
53	.7725+06	7.300	1.862	.4993-01	176.4	289.1	1961.	.0000	.7500	7.300 LENGTH = 7.800
RUN NUMBER	VINF FT/SEC									
53	4752.									

TEST CONDITIONS

RUN NUMBER	DIM DUMMY	TAP NO	P PSI	CP	P/PINF	P/PT	P/PT2
53	1.0000	101.00	.95502-01	.2447-01	1.913	.3303-03	.2756-01
53	1.0000	102.00	.10009	.2693-01	2.005	.3462-03	.2888-01
53	1.0000	103.00	.60973-01	.5930-02	1.221	.2109-03	.1760-01
53	1.0000	104.00	.89397-01	.2146-01	1.800	.3109-03	.2594-01
53	1.0000	105.00	.35729-01	.7624-02	.7156	.1236-03	.1031-01
53	1.0000	106.00	.13185-01	-.1973-01	.2641	.4561-04	.3805-02
53	1.0000	107.00	.87330-01	-.2008-01	1.749	.3021-03	.2520-01
53	1.0000	108.00	.24336-01	-.1374-01	.4874	.8417-04	.7023-02
53	1.0000	109.00	.84110-02	-.2229-01	.1685	.2909-04	.2427-02
53	1.0000	110.00	.71035-01	-.1133-01	.1.423	.2457-03	.2050-01
53	1.0000	111.00	.12337-01	-.2018-01	.2471	.4267-04	.3560-02
53	1.0000	112.00	.27833-02	-.2531-01	.5574-01	.9627-05	.8032-03
53	1.0000	113.00	.11295-02	-.2620-01	.2252-01	.3907-05	.3259-03
53	1.0000	114.00	.23122	-.9734-01	4.631	.7997-03	.6672-01
53	1.0000	115.00	.11458	-.3471-01	2.295	.3963-03	.3307-01
53	1.0000	116.00	-.12630-02	-.2749-01	-.2530-01	.4368-05	.3645-03
53	1.0000	117.00	.54277-02	-.2389-01	.1087	.1877-04	.1566-02
53	1.0000	118.00	-.10194-01	-.3228-01	-.2042	.3526-04	.2942-02
53	1.0000	119.00	.97039-02	-.2160-01	.1944	.3356-04	.2800-02
53	1.0000	120.00	.11831-01	-.2045-01	.2370	.4092-04	.3414-02
53	1.0000	121.00	.44807	-.2138	8.974	.1550-02	.1293

TEST DATA

DATE 03 APR 79

AMES OH58 HEATING AND PRESSURE DATA

OH58 ELEVON/ELEVON-PRESSURES

RUN NUMBER	DIM DUMMY	TAP NO	P PSIA	CP	ELEVON	P/PINF	P/PT	P/PT2
53	1.0000	122.00	.28084	.1240	5.625	.9714-03	.8104-01	
53	1.0000	123.00	.30057	.1346	6.020	.1040-02	.8674-01	
53	1.0000	124.00	.33637	.1538	6.737	.1163-02	.9707-01	
53	1.0000	125.00	.37043	.1721	7.419	.1281-02	.1069	
53	1.0000	126.00	.00000	.00000	.00000	.00000	.00000	

PAGE 133

TR2X0371

DATE 03 APR 79

AMES OH-58 HEATING AND PRESSURE DATA

OH-58 ELEVON/ELEVON-PRESSURES

ELEVON

RUN NUMBER	PN/FT /FT	MACH	QINF PSI	PINF PSI	TINF DEG. R	PTFSIA	TTAV DEG. R	BETA RN/L	ELEVON
48 .1017+07	7.300	2.488	.6670-01	178.2	386.9	1979.		.0000	30.00

RUN NUMBER	VINF FT/SEC	48 4776.
------------	-------------	----------

PARAMETRIC DATA

ALPHA = 30.00	ELEVON = .0000	0000 MACH = 1.000	7.300 LENGTH = 7.800
---------------	----------------	-------------------	----------------------

TEST CONDITIONS

ALPHA = 30.00	ELEVON = .0000	0000 MACH = 1.000	7.300 LENGTH = 7.800
---------------	----------------	-------------------	----------------------

TEST DATA

RUN NUMBER	DIM DUMMY	TAP NO	P PSIA	CP	P/PINF	P/PT	P/PT2
48 1.0000	101.00	.30594	.9615-01	4.587	.7907-03	.6608-01	
48 1.0000	102.00	.33.29	.1063	4.967	.8562-03	.7155-01	
48 1.0000	103.00	.22.17	.6220-01	3.320	.5724-03	.4783-01	
48 1.0000	104.00	.33462	.1077	5.016	.8618-03	.7227-01	
48 1.0000	105.00	.17624	.4402-01	2.642	.4555-03	.3807-01	
48 1.0000	106.00	.95531-01	.1159-01	1.432	.2469-03	.2053-01	
48 1.0000	107.00	.30.45	.9435-01	4.519	.7791-03	.6511-01	
48 1.0000	108.00	.13366	.2691-01	2.004	.3454-03	.2887-01	
48 1.0000	109.00	.58792-01	.3179-02	.8814	.1519-03	.1270-01	
48 1.0000	110.00	.25665	.7634-01	3.848	.6633-03	.5543-01	
48 1.0000	111.00	.89521-01	.9171-02	1.342	.2314-03	.1934-01	
48 1.0000	112.00	.41023-01	-.1032-01	.6150	.1060-03	.8860-02	
48 1.0000	113.00	.29914-01	-.1479-01	.4485	.7731-04	.6461-02	
48 1.0000	114.00	.22.147	.6220-01	3.320	.5724-03	.4783-01	
48 1.0000	115.00	.29128-01	-.1510-01	.4367	.7528-04	.6291-02	
48 1.0000	116.00	.28113-01	-.1551-01	.4215	.7266-04	.6072-02	
48 1.0000	117.00	.38671-01	-.1127-01	.5798	.9994-04	.8352-02	
48 1.0000	118.00	.26052-01	-.1634-01	.3906	.6733-04	.5627-02	
48 1.0000	119.00	.43560-01	-.9301-02	.6530	.1126-03	.9408-02	
48 1.0000	120.00	.41557-01	-.1011-01	.6230	.1074-03	.8976-02	
48 1.0000	121.00	.56564	.2005	8.480	.1462-02	.1222	

DATE 03 APR 79

AMES OH58 HEATING AND PRESSURE DATA

OH58 ELEVON/ELEVON-PRESSURES

RUN NUMBER	DIM DUMMY	TAP NO	P PSIA	CP	ELEVON	P/PINF	P/PT	P/PT2
48	1.0000	122.00	.87898	.3264	13.18	.2272-02	.1898	
48	1.0000	123.00	.91755	.3420	13.76	.2371-02	.1982	
48	1.0000	124.00	1.0289	.3867	15.42	.2659-02	.2222	
48	1.0000	125.00	1.0687	.4027	16.02	.2762-02	.2308	
48	1.0000	126.00	.00000	.00000	.0000	.00000	.0000	

PAGE 135
(R2X038)

DATE 03 APR 79

AMES OR-58 HEATING AND PRESSURE DATA

0H58 ELEVON/ELEVON-PRESURES

ELEVON

RUN NUMBER	RN/FT /FT	MACH	QINF PSI	PINF PSI	TINF DEG. R	PT PSIA	TTAV DEG. R	BETA RN/L	ELEVON
51	.1026+07	7.300	2.501	.6703-01	177.7	388.7	1974.	.0000	1.000

RUN NUMBER	VINF FT/SEC
51	4770.

TEST CONDITIONS

	ALPHA = 30.00	BETA = 0000	MACH = 7.300	LENGTH = 7.800
ELEVON	5.000	1.000		

TEST DATA

RUN NUMBER	DIM DUMMY	TAP NO	P PSIA	CP	P/PINF	P/PT	P/PT2
51	1.0000	101.00	.41142	.1377	6.138	.1059-02	.8842-01
51	1.0000	102.00	.45112	.1536	6.730	.1161-02	.9696-01
51	1.0000	103.00	.29428	.9088-01	.4390	.7572-03	.6325-01
51	1.0000	104.00	.46601	.1604	6.982	.1204-02	.1006
51	1.0000	105.00	.24129	.69668-01	3.599	.6208-03	.5186-01
51	1.0000	106.00	.12204	.2200-01	1.821	.3140-03	.2623-01
51	1.0000	107.00	.41082	.1375	6.128	.1057-02	.8829-01
51	1.0000	108.00	.17569	.345-01	2.821	.4520-03	.3776-01
51	1.0000	109.00	.64064-01	.1188-02	.9557	.1648-03	.1377-01
51	1.0000	110.00	.36812	.1206	5.501	.9487-03	.7935-01
51	1.0000	111.00	.11411	.1883-01	1.702	.2936-03	.2453-01
51	1.0000	112.00	.35212-01	.1273-01	.5253	.9068-04	.7568-02
51	1.0000	113.00	.14291-01	.6109-01	.2133	.3679-04	.3073-02
51	1.0000	114.00	.23187	.6532-01	3.459	.5986-03	.4983-01
51	1.0000	115.00	.98153-02	.2228-01	.1464	.2325-04	.2110-02
51	1.0000	116.00	.50366-02	.2473-01	.7513-01	.1296-04	.1082-02
51	1.0000	117.00	.16328-01	.2028-01	.2436	.4201-04	.3509-02
51	1.0000	118.00	-.50250-03	-.2701-01	-.7496-02	-.1293-05	-.1080-03
51	1.0000	119.00	.19277-01	-.1910-01	.2876	.4960-04	.4443-02
51	1.0000	120.00	.19285-01	-.1910-01	.2877	.4962-04	.4445-02
51	1.0000	121.00	.50804	.1764	7.579	.1307-02	.1092

DATE 03 APR 79

AMES OH58 HEATING AND PRESSURE DATA

PAGE 137

OH58 ELEVON/ELEVON-PRESSURES

RUN NUMBER	DIM DUMMY	TAP NO	P PSIA	CP	ELEVON	P/PINF	P/PT	P/PT2
5	1.0000	122.00	1.2572	.4760	18.76	.3235-02	.2702	
5	1.0000	123.00	1.3017	.4938	19.42	.3349-02	.2798	
5	1.0000	124.00	1.4555	.5552	21.71	.3745-02	.3128	
5	1.0000	125.00	1.4956	.5713	22.31	.3848-02	.3214	
5	1.0000	126.00	.00000	.0000	.0000	.0000	.0000	

(R2X0.39)

DATE 03 APR 79

AMES 0458 HEATING AND PRESSURE DATA

PAGE 138

0458 ELEVON/ELEVON-PRESURES

(R2XDH40)

ELEVON

RUN NUMBER	MACH	QINF PSI	PINF PSIA	ELEVON	PARAMETRIC DATA
52	.9942+06	7.300	2.532	.6761-01	ALPHA = 30.00 ELEVON = -10.00 RNL = .0000 MACH = 7.300 LENGTH = 7.800

TEST CONDITIONS

RUN NUMBER	MACH	QINF PSI	PINF PSIA	ELEVON	PARAMETRIC DATA
52	.9942+06	7.300	2.532	.6761-01	ALPHA = 30.00 ELEVON = -10.00 RNL = .0000 MACH = 7.300 LENGTH = 7.800

RUN NUMBER	DIM DUMMY	TAP NO	P	CP	P/PINF	P/PT	P/PT2
52	1.0000	101.00	.15211	.3351-01	2.250	.3861-03	.324-01
52	1.0000	102.00	.15934	.3638-01	2.357	.4045-03	.3395-01
52	1.0000	103.00	.10895	.1639-01	1.612	.2756-03	.2321-01
52	1.0000	104.00	.15174	.3336-01	2.244	.3892-03	.3233-01
52	1.0000	105.00	.77976-01	.4112-02	1.153	.1979-03	.1661-01
52	1.0000	106.00	.42479-01	.9963-02	.6283	.1078-03	.9050-02
52	1.0000	107.00	.14381	.3022-01	2.127	.3651-03	.3066-01
52	1.0000	108.00	.62478-01	.2033-02	.9241	.1586-03	.1331-01
52	1.0000	109.00	.33598-01	.1350-01	.4964	.8519-04	.7150-02
52	1.0000	110.00	.11719	.1978-01	1.738	.2983-03	.2503-01
52	1.0000	111.00	.37560-01	.1191-01	.5556	.9533-04	.8002-02
52	1.0000	112.00	.24235-01	.1720-01	.3585	.6152-04	.5163-02
52	1.0000	113.00	.22178-01	.1801-01	.3281	.5630-04	.4725-02
52	1.0000	114.00	.23714	.6722-01	3.508	.6020-03	.5056-01
52	1.0000	115.00	.19019	.4861-01	2.813	.4828-03	.4052-01
52	1.0000	116.00	.20758-01	.1858-01	.3070	.5259-04	.4423-02
52	1.0000	117.00	.29175-01	.1524-01	.4316	.7406-04	.6216-02
52	1.0000	118.00	.13676-01	.2138-01	.2023	.3472-04	.2914-02
52	1.0000	119.00	.34731-01	.1304-01	.5137	.8817-04	.7400-02
52	1.0000	120.00	.31969-01	.1413-01	.4729	.8115-04	.6811-02
52	1.0000	121.00	.59407	.2088	.8.787	.1508-02	.1266

TEST DATA

RUN NUMBER	DIM DUMMY	TAP NO	P	PSIA	P	CP	P/PINF	P/PT	P/PT2
52	1.0000	101.00	.15211	.3351-01	2.250	.3861-03	.324-01		
52	1.0000	102.00	.15934	.3638-01	2.357	.4045-03	.3395-01		
52	1.0000	103.00	.10895	.1639-01	1.612	.2756-03	.2321-01		
52	1.0000	104.00	.15174	.3336-01	2.244	.3892-03	.3233-01		
52	1.0000	105.00	.77976-01	.4112-02	1.153	.1979-03	.1661-01		
52	1.0000	106.00	.42479-01	.9963-02	.6283	.1078-03	.9050-02		
52	1.0000	107.00	.14381	.3022-01	2.127	.3651-03	.3066-01		
52	1.0000	108.00	.62478-01	.2033-02	.9241	.1586-03	.1331-01		
52	1.0000	109.00	.33598-01	.1350-01	.4964	.8519-04	.7150-02		
52	1.0000	110.00	.11719	.1978-01	1.738	.2983-03	.2503-01		
52	1.0000	111.00	.37560-01	.1191-01	.5556	.9533-04	.8002-02		
52	1.0000	112.00	.24235-01	.1720-01	.3585	.6152-04	.5163-02		
52	1.0000	113.00	.22178-01	.1801-01	.3281	.5630-04	.4725-02		
52	1.0000	114.00	.23714	.6722-01	3.508	.6020-03	.5056-01		
52	1.0000	115.00	.19019	.4861-01	2.813	.4828-03	.4052-01		
52	1.0000	116.00	.20758-01	.1858-01	.3070	.5259-04	.4423-02		
52	1.0000	117.00	.29175-01	.1524-01	.4316	.7406-04	.6216-02		
52	1.0000	118.00	.13676-01	.2138-01	.2023	.3472-04	.2914-02		
52	1.0000	119.00	.34731-01	.1304-01	.5137	.8817-04	.7400-02		
52	1.0000	120.00	.31969-01	.1413-01	.4729	.8115-04	.6811-02		
52	1.0000	121.00	.59407	.2088	.8.787	.1508-02	.1266		

DATE 03 APR 79

AMES OH5B HEATING AND PRESSURE DATA

OH5B ELEVON-ELEVON-PRESSURES

PAGE 139
(R2XD401)

RUN NUMBER	DIM DUMMY	TAP NO	P PSIA	CP	ELEVON	P/PINF	P/PT	P/PT2
52	1.0000	122.00	.39839	.1312	5.893	.1011-02	.8488-01	
52	1.0000	123.00	.4319	.1454	6.422	.1102-02	.9251-01	
52	1.0000	124.00	.49017	.1676	7.250	.1244-02	.1044	
52	1.0000	125.00	.53040	.1835	7.845	.1346-02	.1130	
52	1.0000	126.00	.00000	.0000	.0000	.0000	.0000	

DATE 03 APR 79

AMES OH5B HEATING AND PRESSURE DATA

OH5B ELEVON-ELEVON-PRESURES

ELEVON

ELEVON

RUN NUMBER	HTN /FT	HACH	QINF PSI	PINF PSIA	TINF DEG. R	PTA	TTAV DEG. R	PARAMETRIC DATA
38 .5088+06	7.300	1.266	.33:-01	180.3	197.3	2000.	.1194-01	ALPHA = 40.00 ELEVON = .0000 MACH = .0000 AN/L = .5000 LENGTH = 6.000

RUN NUMBER	VINF FT/SEC	ELEVON
38	4805.	

TEST CONDITIONS	
-----------------	--

RUN NUMBER	HTN /FT	HACH	QINF PSI	PINF PSIA	TINF DEG. R	PTA	TTAV DEG. R	PARAMETRIC DATA
38	.5088+06	7.300	1.266	.33:-01	180.3	197.3	2000.	.1194-01 .5000 MACH = .0000 AN/L = .5000 LENGTH = 6.000

TEST CONDITIONS

TEST DATA

RUN NUMBER	DIM DUMMY	TAP NO	P PSIA	C P	P/PINF	P/PT	P/PT2
38	1.0000	101.00	.29511	.2062	8.693	.1495-02	.1252
38	1.0000	102.00	.32355	.2287	9.531	.1640-02	.1373
38	1.0000	103.00	.22534	.1511	6.638	.1142-02	.9562-01
38	1.0000	104.00	.34814	.2481	10.25	.1764-02	.1477
38	1.0000	105.00	.20006	.1312	5.893	.1044-02	.8489-01
38	1.0000	106.00	.16681	.1049	4.914	.8453-03	.7078-01
38	1.0000	107.00	.32947	.2334	9.706	.1670-02	.1398
38	1.0000	108.00	.17123	.1084	5.044	.8677-03	.7266-01
38	1.0000	109.00	.1425	.6341-01	3.365	.5789-03	.4848-01
38	1.0000	110.00	.30782	.2163	9.067	.1560-02	.1305
38	1.0000	111.00	.13666	.8111-01	4.026	.6925-03	.5799-01
38	1.0000	112.00	.69641-01	.2819-01	2.051	.3529-03	.2955-01
38	1.0000	113.00	.29921-31	.3179-02	.8814	.1516-03	.1270-01
38	1.0000	114.00	.22802	.1533	6.717	.1155-02	.9676-01
38	1.0000	115.00	.14085-01	.1569-01	.4149	.7137-04	.5977-02
38	1.0000	116.00	.90312-02	.1969-01	.2660	.4577-04	.3832-02
38	1.0000	117.00	.16943-01	.1343-01	.4991	.8586-04	.7190-02
38	1.0000	118.00	.50069-02	.3076-01	-.1475	-.2537-04	-.2125-02
38	1.0000	119.00	.18742-01	.1201-01	.5521	.9497-04	.7953-02
38	1.0000	120.00	.26600-01	.5802-02	.7836	.1348-03	.1129-01
38	1.0000	121.00	.53615	.3966	15.79	.2717-02	.2275

DATE 03 APR 79

AMES OH5B HEATING AND PRESSURE DATA

OH5B ELEVON/ELEVON-PRESSURES

RUN NUMBER	DIM DUMMY	TAP NO	P PSIA	CP	ELEVON	P/PINF	P/PT	P/PT2
38	1.0000	122.00	.97500	.7431	28.72	.4941-02	.4137	
38	1.0000	123.00	1.0067	.7682	29.65	.5101-02	.4272	
38	1.0000	124.00	1.0932	.8364	32.20	.5540-02	.4639	
38	1.0000	125.00	1.1537	.8842	33.98	.5846-02	.4896	
38	1.0000	126.00	1.1348	.8693	33.43	.5751-02	.4816	

PAGE 141
(R2XD41)

DATE 03 APR 79

AMES OH-58 HEATING AND PRESSURE DATA

OH-58 ELEVON/ELEVON-PRESSES

ELEVON

ELEVON

ALPHA = 40.00
ELEVON = 5.000
RNL = .5000
MACH = .0000
LENGTH = 6.000

TEST CONDITIONS

RUN NUMBER	RN/FT /FT	MACH	QINF PSI	PINF PSI	TINF DEG. R	PTA V DEG. R	PT2PT1	ALPHA DEG.	BETA DEG.	PHI DEG.	RHO SLUGS/ FT ³
41	.5159+06	7.300	1.294	.3469-01	181.3	201.9	2010.	.1193-01	.40.00	.0000	.0000

RUN NUMBER	VINF FT/SEC
41	4818.

4818.

TEST DATA

RUN NUMBER	DIM DUMMY	TAP NO	P PSI	CP	P/PINF	P/PT	P/PT2
41	1.0000	101.00	.36604	.2560	10.55	.1813-02	.1520
41	1.0000	102.00	.40257	.2842	11.60	.1994-02	.1671
41	1.0000	103.00	.27851	.1884	8.028	.1380-02	.1156
41	1.0000	104.00	.44461	.3167	12.82	.2202-02	.1846
41	1.0000	105.00	.25245	.1683	7.276	.1250-02	.1048
41	1.0000	106.00	.21361	.1382	6.157	.1058-02	.8869-01
41	1.0000	107.00	.43071	.3060	12.41	.2133-02	.1788
41	1.0000	108.00	.21443	.1389	6.181	.1062-02	.8903-01
41	1.0000	109.00	.15092	.8981-01	4.350	.7476-03	.6266-01
41	1.0000	110.00	.40839	.2887	11.77	.2023-02	.1696
41	1.0000	111.00	.18385	.1152	5.299	.7633-01	
41	1.0000	112.00	.88806-01	.4181-01	2.560	.4399-03	.3687-01
41	1.0000	113.00	.42260-01	.5846-02	1.218	.2093-03	.1755-01
41	1.0000	114.00	.21443	.1389	6.181	.1062-02	.8903-01
41	1.0000	115.00	.15283-01	.1500-01	.4405	.7571-04	.6346-02
41	1.0000	116.00	.92130-02	.-1969-01	.2655	.4564-04	.3825-02
41	1.0000	117.00	.15953-01	.-1448-01	.4598	.7902-04	.6623-02
41	1.0000	118.00	.59745-02	-2219-01	.1722	.2959-04	.2481-02
41	1.0000	119.00	.18639-01	.-1241-01	.5372	.9233-04	.7739-02
41	1.0000	120.00	.20481-01	.-1098-01	.5903	.1015-03	.8504-02
	1.0000	121.00	.57955	.4210	16.70	.2871-02	.2406

DATE 03 APR 79

AMES OH58 HEATING AND PRESSURE DATA

OH58 ELEVON/ELEVON-PRESSURES

RUN NUMBER	DIM DUMMY	TAP NO	P PSIA	CP	P/PINF	P/P1	P/P12
41	1.0000	122.00	1.2454	.9355	35.90	.6169-02	.5171
41	1.0000	123.00	1.2987	.9767	37.43	.6433-02	.5392
41	1.0000	124.00	1.4120	1.064	40.70	.6995-02	.5863
41	1.0000	125.00	1.4865	1.122	42.84	.7363-02	.6172
41	1.0000	126.00	1.4605	1.102	42.10	.7234-02	.6064

PAGE 143
(R2X042)

DATE 03 APR 79

AMES OH58 HEATING AND PRESSURE DATA
OH58 ELEVON/ELEVON-PRESSURES

ELEVON

ELEVON

RUN NUMBER	RN/FT /FT	MACH	QINF PSI	TINF PSI	PT DEG. R	BETA RN/L	PARAMETRIC DATA
43	.5091+06	7.300	1.253	.3358-01	178.8	199.9	ALPHA = 40.00 ELEVON = -10.00 .0000 MACH = 7.300 LENGTH = 6.000
							.5000

TEST CONDITIONS

RUN NUMBER	RN/FT FT/SEC	VINF	PT DEG. R	BETA RN/L	PARAMETRIC DATA
43	4785.				ALPHA = 40.00 ELEVON = -10.00 .0000 MACH = 7.300 LENGTH = 6.000
					.5000

43 4785.

TEST DATA

RUN NUMBER	DIM DUMMY	TAP NO	P PSIA	CP	P/PINF	P/PT	P/PT2
43	1.0000	101.00	.19060	.1254	5.677	.9780-03	.8178-01
43	1.0000	102.00	.20082	.1335	5.981	.1030-02	.8616-01
43	1.0000	103.00	.14033	.8523-01	4.179	.7200-03	.6021-01
43	1.0000	104.00	.20156	.1341	6.003	.1034-02	.8648-01
43	1.0000	105.00	.11190	.6254-01	3.333	.5792-03	.4801-01
43	1.0000	106.00	.88170-01	.4359-01	2.626	.4521-03	.3783-01
43	1.0000	107.00	.19337	.1276	5.759	.9922-03	.8297-01
43	1.0000	108.00	.87052-01	.4269-01	2.593	.4467-03	.3735-01
43	1.0000	109.00	.49253-01	.1252-01	1.467	.2527-03	.2113-01
43	1.0000	110.00	.18101	.1177	5.391	.9289-03	.7766-01
43	1.0000	111.00	.62501-01	.2309-01	1.861	.3207-03	.2682-01
43	1.0000	112.00	.36759-01	.2540-02	1.095	.1886-03	.1577-01
43	1.0000	113.00	.32778-01	.6377-03	.9762	.1682-03	.1406-01
43	1.0000	114.00	.23298	.1592	6.939	.1195-02	.9996-01
43	1.0000	115.00	.19907	.1321	5.929	.1021-02	.8541-01
43	1.0000	116.00	.27887-01	.4543-02	.8306	.1431-03	.1197-01
43	1.0000	117.00	.33901-01	.2599-03	1.010	.1739-03	.1455-01
43	1.0000	118.00	.23805-01	.7802-02	.7090	.1221-03	.1021-01
43	1.0000	119.00	.37609-01	.3218-02	.120	.1930-03	.1614-01
43	1.0000	120.00	.36439-01	.22885-02	1.085	.1870-03	.1563-01
43	1.0000	121.00	.60553	.4566	18.03	.3107-02	.2598

DATE 03 APR 79

AMES OH58 HEATING AND PRESSURE DATA

PAGE 145
(R2XD43)

OH58 ELEVON/ELEVON-PRESSURES

RUN NUMBER	DIM DUMMY	TAP NO	P PSIA	CP	ELEVON P/PINF	P/PT	P/PT2
43	1.0000	122.00	.55252	.4143	16.46	.2835-02	.2371
43	1.0000	123.00	.57310	.4307	17.07	.2941-02	.2459
43	1.0000	124.00	.61657	.4655	18.36	.3164-02	.2645
43	1.0000	125.00	.66422	.5035	19.78	.3408-02	.2850
43	1.0000	126.00	.64498	.4881	19.21	.3309-02	.2767

@ 58 ELEVON/ELEVON-PRESSURES

ELEVON

RUN NUMBER	RM/FT /FT	MACH	QINF PSI	PINF PSI	TINF DEG. R	PTPSIA	TTAV DEG. R	BETA RN/L	MACH	LENGTH = 6.000
44	.7161+06	7.300	1.876	.5029-01	186.8	294.3	2065.	.7500	.0000	.0000

RUN NUMBER	VINF FT/SEC
44	4890.

ELEVON	ALPHA = 40.00	BETA	PARAMETRIC DATA
	ELEVON = -10.00	RN/L	PHI DEG. SLUGS/FT ³ .2260-04

TEST CONDITIONS

RUN NUMBER	RM/FT /FT	MACH	QINF PSI	PINF PSI	TINF DEG. R	PTPSIA	TTAV DEG. R	BETA RN/L	MACH	LENGTH = 6.000
44	.7161+06	7.300	1.876	.5029-01	186.8	294.3	2065.	.7500	.0000	.0000

TEST DATA

RUN NUMBER	DIM DUMMY	TAP NO	P PSIA	CP	P/PINF	P/PT	P/PT2
44	1.0000	101.00	.26002	.1118	5.171	.8837-03	.7446-01
44	1.0000	102.00	.28924	.1274	5.752	.9829-03	.8283-01
44	1.0000	103.00	.19813	.7881-01	3.940	.6733-03	.5674-01
44	1.0000	104.00	.29207	.1289	5.808	.9926-03	.8364-01
44	1.0000	105.00	.16113	.5908-01	3.204	.5476-03	.4614-01
44	1.0000	106.00	.12329	.3891-01	2.452	.4190-03	.3530-01
44	1.0000	107.00	.27476	.1197	5.464	.9337-03	.7868-01
44	1.0000	108.00	.12460	.3961-01	2.478	.4234-03	.3568-01
44	1.0000	109.00	.62026-01	.6256-02	1.233	.2108-03	.1776-01
44	1.0000	110.00	.25958	.1116	5.162	.8821-03	.7433-01
44	1.0000	111.00	.92540-01	.2252-01	1.840	.3145-03	.2650-01
44	1.0000	112.00	.36861-01	.7265-02	.7290	.1246-03	.1050-01
44	1.0000	113.00	.23577-01	.1429-01	.4668	.7978-04	.6723-02
44	1.0000	114.00	.31885	.1432	6.340	.1084-02	.9131-01
44	1.0000	115.00	.28712	.1262	5.709	.9757-03	.8222-01
44	1.0000	116.00	.16418-01	.1806-01	.3265	.5580-04	.4702-02
44	1.0000	117.00	.25598-01	.1263-01	.5287	.9035-04	.7614-02
44	1.0000	118.00	.13142-01	.1980-01	.2613	.4466-04	.3763-02
44	1.0000	119.00	.30635-01	.1048-01	.6092	.1041-03	.8773-02
44	1.0000	120.00	.27749-01	.1202-01	.5518	.9430-04	.7946-02
44	1.0000	121.00	.82209	.4104	16.31	.2787-02	.2348

DATE 03 APR 79

AMES OH58 HEATING AND PRESSURE DATA

OH58 ELEVON/ELEVON-PRESSURES

RUN NUMBER	DIM DUMMY	TAP NO	P PSIA	CP	ELEVON	P/PINF	P/PT	P/PT2
44	1.0000	122.00	.80547	.4026	16.02	.2737-02	.2307	
44	1.0000	123.00	.83201	.4167	16.54	.2827-02	.2383	
44	1.0000	124.00	.91002	.4583	18.10	.3093-02	.2606	
44	1.0000	125.00	.97332	.4920	19.35	.3309-02	.2787	
44	1.0000	126.00	.94305	.4759	18.75	.3205-02	.2701	

PAGE 147
(R2XDH4)

DATE 03 APR 79

AMES OH58 HEATING AND PRESSURE DATA

OH58 ELEVON-ELEVON-PRESSURES

ELEVON

ELEVON

RUN NUMBER	RN/FT /FT	MACH	QINF PSI	PINF PSI	TINF DEG. R	PTA DEG. R	TIAV DEG. R	PTAPT1 DEG.	ALPHA DEG.	BETA DEG.	PHI DEG.	RHO SLUGS/ FT ³
39	.1042+07	7.300	2.533	.6789-01	177.4	393.5	1970.	.1198-01	40.04	.0000	.0000	.3212-04

RUN NUMBER	VINF FT/SEC	ELEVON	PARAMETRIC DATA
39	4765.		ALPHA = 40.00 ELEVON = .0000 RN/L = 1.000 MACH = .0000 LENGTH = 6.000

TEST CONDITIONS

RUN NUMBER	RN/FT	MACH	QINF PSI	PINF PSI	TINF DEG. R	PTA DEG. R	TIAV DEG. R	PTAPT1 DEG.	ALPHA DEG.	BETA DEG.	PHI DEG.	RHO SLUGS/ FT ³
39	.1042+07	7.300	2.533	.6789-01	177.4	393.5	1970.	.1198-01	40.04	.0000	.0000	.3212-04

TEST DATA

RUN NUMBER	DIM DUMMY	TAP NO	P PSIA	C P	P/PINF	P/PT	P/PT2
39	1.0000	101.00	.56391	.1959	8.306	.1433-02	.1197
39	1.0000	102.00	.63231	.2229	9.313	.1607-02	.1342
39	1.0000	103.00	.41374	.1366	6.094	.1051-02	.8780-01
39	1.0000	104.00	.69006	.2457	10.16	.1754-02	.1464
39	1.0000	105.00	.37177	.1200	5.476	.9448-03	.7889-01
39	1.0000	106.00	.31686	.9830-01	4.667	.8052-03	.6724-01
39	1.0000	107.00	.64311	.2271	9.472	.1634-02	.1365
39	1.0000	108.00	.31441	.9734-01	4.631	.7990-03	.6672-01
39	1.0000	109.00	.20847	.5561-01	3.071	.5298-03	.4424-01
39	1.0000	110.00	.60942	.2138	8.976	.1549-02	.1293
39	1.0000	111.00	.27645	.8235-01	4.072	.7025-03	.5866-01
39	1.0000	112.00	.13552	.2670-01	1.996	.3444-03	.2876-01
39	1.0000	113.00	.62824-01	.2002-02	.9253	.1597-03	.1333-01
39	1.0000	114.00	.22770	.6310-01	3.354	.5787-03	.4832-01
39	1.0000	115.00	.27752-01	.1585-01	.4088	.7052-04	.5889-02
39	1.0000	116.00	.19816-01	.1898-01	.2919	.5036-04	.4205-02
39	1.0000	117.00	.29923-01	.1499-01	.4407	.7604-04	.6350-02
39	1.0000	118.00	.47352-02	.2494-01	.6974-01	.1203-04	.1005-02
39	1.0000	119.00	.27706-01	.587-01	.4081	.7041-04	.5879-02
39	1.0000	120.00	.41688-01	.1035-01	.6140	.1059-03	.8846-02
39	1.0000	121.00	.97077	.3565	14.30	.2467-02	.2060

DATE 03 APR 79

AMES OH58 HEATING AND PRESSURE DATA

OH58 ELEVON/ELEVON-PRESSURES

RUN NUMBER	DIM DUMMY	TAP NO	P PSIA	CP	ELEVON	P/P INF	P/PT	P/PT2
39	1.0000	122.00	1.9315	.7358	28.45	.4908-02	.4099	
39	1.0000	123.00	2.0009	.7633	29.47	.5098-02	.4216	
39	1.0000	124.00	2.1631	.8273	31.86	.5497-02	.4590	
39	1.0000	125.00	2.2730	.8707	33.48	.5775-02	.4824	
39	1.0000	126.00	2.2273	.8527	32.81	.5660-02	.4727	

PAGE 149

(R2XD45)

DATE 03 APR 79

AMES 0458 HEATING AND PRESSURE DATA

0458 ELEVON/ELEVON-PRESURES

ELEVON

RUN NUMBER	FM/FT /FT	MACH	QINF PSI	PINF PSIA	TINF DEG. R	PT PSIA	TTAV DEG. R	BETA RNL	ELEVON
42	.9925+06	7.300	2.498	.6697-01	181.7	389.8	2014.	.0000	40.00
								1.000	5.000

RUN NUMBER	VINF FT/SEC	RUN NUMBER	VINF FT/SEC
42	4823.		

TEST CONDITIONS

ALPHA ELEVON	40.00	BETA RNL	0.000	MACH	7.300	LENGTH	6.000

ELEVON	PARAMETRIC DATA

TEST DATA

RUN NUMBER	DIM DUMMY	TAP NO	P PSIA	CP	P/PINF	P/P	P/P12
42	1.00000	101.00	.67121	.2419	10.02	.1722-02	.1444
42	.00000	102.00	.71886	.2730	11.18	.1921-02	.1611
42	.00000	103.00	.49952	.1732	7.459	.1281-02	.1074
42	.00000	104.00	.83564	.3077	12.48	.2144-02	.1797
42	.00000	105.00	.45339	.1547	6.770	.1163-02	.9752-01
42	.00000	106.00	.36875	.1208	5.506	.9459-03	.7932-01
42	.00000	107.00	.79898	.2928	11.92	.2049-02	.1717
42	.00000	108.00	.38108	.1257	5.691	.9775-03	.8197-01
42	.00000	109.00	.24973	.7316-01	3.729	.6106-03	.5332-01
42	.00000	110.00	.77374	.2829	11.55	.1985-02	.1664
42	.00000	111.00	.33923	.1090	5.066	.8702-03	.7297-01
42	.00000	112.00	.15141	.3380-01	2.261	.3257-01	
42	.00000	113.00	.59011-01	.3195-02	.8812	.1514-03	.1269-01
42	.00000	114.00	.19719	.523-01	2.945	.5059-03	.4242-01
42	.00000	115.00	.20857-01	.1816-01	.3115	.5350-04	.4486-02
42	.00000	116.00	.11846-01	.2207-01	.1769	.3039-04	.2519-02
42	.00000	117.00	.22599-01	.1776-01	.3375	.5797-04	.4861-02
42	.00000	118.00	.10940-01	.2243-01	.1634	.2805-04	.2353-02
42	.00000	119.00	.25828-01	.1641-01	.3857	.6625-04	.5556-02
42	.00000	120.00	.26382-01	.1625-01	.3940	.6768-04	.5675-02
42	.00000	121.00	1.0149	.3795	15.16	.2605-02	.2183

DATE 03 APR 79

AMES OH58 HEATING AND PRESSURE DATA

0458 ELEVON/ELEVON-PRESSURES

PAGE 151
(R2XDW6)

RUN NUMBER	DIM DUMMY	TAP NO	P PSIA	CP	ELEVON P/PINF	P/PT	P/PT2
42	1.0000	122.00	2.3235	.9033	34.70	.5960-02	.4999
42	1.0000	123.00	2.4044	.9357	35.91	.6168-02	.5172
42	1.0000	124.00	2.6249	1.024	39.20	.6733-02	.5646
42	1.0000	125.00	2.7392	1.070	40.90	.7027-02	.5892
42	1.0000	126.00	2.7149	1.060	40.54	.6954-02	.5840

DATE 03 APR 79

AMES 0458 HEATING AND PRESSURE DATA

0458 ELEVON/ELEVON-PRESSURES

ELEVON

RUN NUMBER	RN/FT /FT	MACH	QINF PSI	PINF PSI	TINF DEG. R	PT INF DEG. R	TTAV DEG. R	PHI DEG.	BETA DEG.	LENGTH =
45	.1019+07	7.300	2.507	.6722-01	178.9	390.2	1986.	.1196-01	40.00	6.000

RUN NUMBER	VINF FT/SEC	
45	4785.	

TEST CONDITIONS

ALPHA = 40.00	BETA RN/L = -10.00	ELEVON = 0.000	PARAMETRIC DATA

RUN NUMBER	DIM DUMMY	TAP NO	P PSIA	CP	P/PINF	P/PT	P/PT2
45	1.0000	101.00	.28902	.8846-01	4.300	.7408-03	.6195-01
45	1.0000	102.00	.32954	.1046	4.903	.8446-03	.7063-01
45	1.0000	103.00	.20873	.5644-01	3.105	.5350-03	.4474-01
45	1.0000	104.00	.34424	.1105	5.121	.8823-03	.7378-01
45	1.0000	105.00	.16567	.3927-01	2.465	.4246-03	.3551-01
45	1.0000	106.00	.11781	.2018-01	1.753	.3020-03	.2525-01
45	1.0000	107.00	.31962	.1007	4.755	.8192-03	.6851-01
45	1.0000	108.00	.12310	.2229-01	1.831	.3155-03	.2639-01
45	1.0000	109.00	.39004-01	-.1125-01	.5803	.9997-04	.8350-02
45	1.0000	110.00	.29847	.9223-01	4.441	.7650-03	.6397-01
45	1.0000	111.00	.84035-01	.6708-02	1.250	.2154-03	.1801-01
45	1.0000	112.00	.111565-01	-.2219-01	1.721	.2964-04	.2479-02
45	1.0000	113.00	-.19961-01	-.3477-01	-.2970	-.5116-04	.4278-02
45	1.0000	114.00	-.14672	.3171-01	2.183	.3761-03	.3145-01
45	1.0000	115.00	.31755	.9984-01	4.724	.8139-03	.6806-01
45	1.0000	116.00	-.23661-01	-.3624-01	-.3520	-.6064-04	.5071-02
45	1.0000	117.00	-.13847-01	-.3233-01	-.2050	-.3549-04	.2968-02
45	1.0000	118.00	-.29330-01	-.3851-01	-.4364	-.7517-04	.6286-02
45	1.0000	119.00	-.13275-01	-.3210-01	-.1975	-.3402-04	.2845-02
45	1.0000	120.00	-.98758-02	-.3075-01	-.1469	-.2531-04	.2117-02
45	1.0000	121.00	.96426	.3578	14.35	.2471-02	.2067

TEST DATA

RUN NUMBER	DIM DUMMY	TAP NO	P PSIA	CP	P/PINF	P/PT	P/PT2
45	1.0000	101.00	.28902	.8846-01	4.300	.7408-03	.6195-01
45	1.0000	102.00	.32954	.1046	4.903	.8446-03	.7063-01
45	1.0000	103.00	.20873	.5644-01	3.105	.5350-03	.4474-01
45	1.0000	104.00	.34424	.1105	5.121	.8823-03	.7378-01
45	1.0000	105.00	.16567	.3927-01	2.465	.4246-03	.3551-01
45	1.0000	106.00	.11781	.2018-01	1.753	.3020-03	.2525-01
45	1.0000	107.00	.31962	.1007	4.755	.8192-03	.6851-01
45	1.0000	108.00	.12310	.2229-01	1.831	.3155-03	.2639-01
45	1.0000	109.00	.39004-01	-.1125-01	.5803	.9997-04	.8350-02
45	1.0000	110.00	.29847	.9223-01	4.441	.7650-03	.6397-01
45	1.0000	111.00	.84035-01	.6708-02	1.250	.2154-03	.1801-01
45	1.0000	112.00	.111565-01	-.2219-01	1.721	.2964-04	.2479-02
45	1.0000	113.00	-.19961-01	-.3477-01	-.2970	-.5116-04	.4278-02
45	1.0000	114.00	-.14672	.3171-01	2.183	.3761-03	.3145-01
45	1.0000	115.00	.31755	.9984-01	4.724	.8139-03	.6806-01
45	1.0000	116.00	-.23661-01	-.3624-01	-.3520	-.6064-04	.5071-02
45	1.0000	117.00	-.13847-01	-.3233-01	-.2050	-.3549-04	.2968-02
45	1.0000	118.00	-.29330-01	-.3851-01	-.4364	-.7517-04	.6286-02
45	1.0000	119.00	-.13275-01	-.3210-01	-.1975	-.3402-04	.2845-02
45	1.0000	120.00	-.98758-02	-.3075-01	-.1469	-.2531-04	.2117-02
45	1.0000	121.00	.96426	.3578	14.35	.2471-02	.2067

DATE 03 APR 79

AMES OH58 HEATING AND PRESSURE DATA

PAGE 153
(R2XD47)

OH58 ELEVON/ELEVON-PRESSURES						
RUN NUMBER	DIM DUMMY	TAP NO	P PSIA	CP	P/PINF	P/PT
45	1.0000	122.00	1.0272	.3829	15.28	.2633-.02
45	1.0000	123.00	1.0565	.3946	15.72	.2708-.02
45	1.0000	124.00	1.1687	.4393	17.39	.2995-.02
45	1.0000	125.00	1.2418	.4695	18.48	.3183-.02
45	1.0000	126.00	1.2050	.4542	17.94	.3091-.02

DATE 03 APR 79

AMES OH5B HEATING AND PRESSURE DATA

OH5B ELEVON/ELEVON-PRESSURES

ELEVON

ALPHA = 40.00
ELEVON = .0000
RNL = 3.000

TEST CONDITIONS

RUN NUMBER	RN/FT /FT	MACH	QINF PSI	PINF PSI	TINF DEG. R	PI PSI	TTAV DEG. R	P12P11	ALPHA DEG.	BETA DEG.	PHI DEG.	RHO SLUGS/ FT3
40	.2889+07	7.300	7.412	.1987	164.1	1160.	2038.	.1190-01	40.05	.0000	.0000	.9057-04

RUN NUMBER VINF F1/SEC
40 4855.

TEST DATA

RUN NUMBER	DIM DUMMY	TAP NO	P PSI	CP	P/PINF	P/PT	P/PT2
40	1.00000	101.00	1.5594	.1836	7.848	.1355-02	.1130
40	1.00000	102.00	.7771	.2129	8.943	.1533-02	.1288
40	1.00000	103.00	.1054	.1223	5.563	.9533-03	.8012-01
40	1.00000	104.00	.9326	.2339	9.726	.1667-02	.1401
40	1.00000	105.00	.0204	.1109	5.135	.8800-03	.7396-01
40	1.00000	106.00	.70608	.6815-01	3.553	.6089-03	.5118-01
40	1.00000	107.00	.7978	.2157	9.048	.1550-02	.1303
40	1.00000	108.00	.82644	.8169-01	4.159	.7127-03	.5896-01
40	1.00000	109.00	.43000	.3120-01	2.164	.3708-03	.3117-01
40	1.00000	110.00	.17363	.2074	8.738	.1497-02	.1259
40	1.00000	111.00	.75596	.7518-01	3.804	.6519-03	.5479-01
40	1.00000	112.00	.35523	.2112-01	1.788	.3068-03	.2575-01
40	1.00000	113.00	.16084	-.5109-02	.8094	.1387-03	.1166-01
40	1.00000	114.00	.28272	.1133-01	1.423	.2438-03	.2049-01
40	1.00000	115.00	.12064	-.1053-01	.6071	.1010-03	.8744-02
40	1.00000	116.00	.53478-01	-.1959-01	.2691	.4612-04	.3876-02
40	1.00000	117.00	.69402-01	-.1744-01	.3493	.5985-04	.5030-02
40	1.00000	118.00	.37747-01	-.2172-01	.1900	.3255-04	.2735-02
40	1.00000	119.00	.61934-01	-.1845-01	.3117	.5341-04	.4489-02
40	1.00000	120.00	.88103-01	-.1492-01	.4434	.7599-04	.6386-02
40	1.00000	121.00	.25976	.32356	13.07	.2240-02	.1883

DATE 03 APR 79

AMES OH58 HEATING AND PRESSURE DATA

OH58 ELEVON/ELEVON-PRESSES

RUN NUMBER	DIM DUMMY	TAP NO	P PSIA	CP	ELEVON	P/PINF	P/PT	P/PT2
40	1.0000	122.00	4.5771	.5907	23.03	.3947-.02	.3318	
40	1.0000	123.00	.00000	.0000	.0000	.0000	.0000	
40	1.0000	124.00	.00000	.0000	.0000	.0000	.0000	
40	1.0000	125.00	6.2659	.8165	31.53	.5404-.02	.4542	
40	1.0000	126.00	.00000	.0000	.0000	.0000	.0000	

PAGE 155
(REXOH8)

DATE 03 APR 79

AMES OH58 HEATING AND PRESSURE DATA

OH58 FUSELAGE/ELEVON-PRESSURES ELEVON

ELEVON

	RN/FT /FT	MACH	QINF PSI	PINF PSIA	TINF DEG. R	PTAV DEG. R	BETA RN/L	MACH	PARAMETRIC DATA
ALPHA =		30.00					.0000	7.300	LENGTH = 14.40
ELEVON =		.00000					.50000		

TEST CONDITIONS

RUN NUMBER	RN/FT FT	MACH	QINF PSI	PINF PSIA	TINF DEG. R	PTAV DEG. R	BETA RN/L	MACH	PARAMETRIC DATA	
73	.5153+06	7.300	1.258	.3372-01	178.0	195.6	1976.	.1197-01	30.00	.0000 .0000
RUN NUMBER	VINF FT/SEC									
73	4773.									

73 4773.

TEST DATA

RUN NUMBER	DIM DRAFTY	TAP NO	P PSIA	CP	P/PINF	P/PT	P/PT2
73	1.0000	101.00	.14052	.8490-01	4.167	.7185-03	.6004-01
73	1.0000	102.00	.12822	.7512-01	3.802	.6556-03	.5478-01
73	1.0000	103.00	.11728	.6643-01	3.478	.5997-03	.5011-01
73	1.0000	104.00	.12526	.7277-01	3.715	.6405-03	.5352-01
73	1.0000	105.00	.10042	.5203-01	2.978	.5135-03	.4290-01
73	1.0000	106.00	.73980-01	.3193-01	2.191	.3778-03	.3156-01
73	1.0000	107.00	.11851	.6740-01	3.514	.6060-03	.5063-01
73	1.0000	108.00	.89229-01	.4413-01	2.646	.4563-03	.3812-01
73	1.0000	109.00	.53552-01	.1584-01	1.591	.2744-03	.2292-01
73	1.0000	110.00	.11618	.6555-01	3.445	.5941-03	.4964-01
73	1.0000	111.00	.60737-01	.2148-01	1.801	.3106-03	.2595-01
73	1.0000	112.00	.37706-01	.3168-02	1.118	.1928-03	.1611-01
73	1.0000	113.00	.36236-01	.1999-02	1.075	.1853-03	.1548-01
0	1.0000	114.00	.00000	.00000	.00000	.00000	.00000
0	1.0000	115.00	.00000	.00000	.00000	.00000	.00000
73	1.0000	116.00	.35667	.2657	10.87	.1875-02	.1567
0	1.0000	117.00	.00000	.00000	.00000	.00000	.00000
0	1.0000	118.00	.00000	.00000	.00000	.00000	.00000
73	1.0000	119.00	.27229-01	-.5145-02	.8081	.1393-03	.1164-01
0	1.0000	120.00	.00000	.00000	.00000	.00000	.00000
0	1.0000	121.00	.00000	.00000	.00000	.00000	.00000

OH58 FUSELAGE/ELEVON-PRESSURES ELEVON

RUN NUMBER	DIM DUMMY	TAP NO	P PSIA	CP	P/PINF	P/PT	P/PT2
73	1.0000	122.00	.477708	.3525	14.15	.24440-02	.2038
73	1.0000	123.00	.52524	.3907	15.58	.2686-02	.2244
73	1.0000	124.00	.59052	.4426	17.51	.3020-02	.2523
73	1.0000	125.00	.62332	.4687	18.48	.3187-02	.2663
73	1.0000	126.00	.64149	.4832	19.02	.3280-02	.2741

DATE 03 APR 79

AMES OH58 HEATING AND PRESSURE DATA
OH58 FUSELAGE/ELEVON-PRESURES ELEVON

PAGE 158
IR2XD501

ELEVON

RUN NUMBER	RN/FT /FT	MACH	QINF PSIA	PINF PSIA	TINF DEG. R	PTAV PSIA	BETA RN/L	.0000	MACH	.7300	LENGTH	14.40
64	.5344+06	7.300	1.271	.3408-01	174.8	157.1			.1200-01	30.00	.0000	.0000

RUN NUMBER	VINF FT/SEC
64	4731.

TEST CONDITIONS

ALPHA ELEVON = 30.00	ALPHA ELEVON = 10.00	TTAV DEG. R	PI2PT1 DEG.	ALPHA DEG.	BETA DEG.	PHI DEG.	RHO SLUGS/FT ³
							.1636-04
				.5000			

TEST DATA

RUN NUMBER	DIM DUMMY	TAP NO	P PSIA	C P	P/PINF	P/P	P/PT2
64	1.0000	101.00	.8691	.1202	5.484	.9485-03	.7902-01
64	1.0000	102.00	.8148	.1159	5.325	.9210-03	.7672-01
64	1.0000	103.00	.41142	.2968	12.07	.2088-02	.1739
64	1.0000	104.00	.36057	.1781	7.645	.1322-02	.1102
64	1.0000	105.00	.23330	.1567	6.845	.1184-02	.9863-01
64	1.0000	106.00	.86115-01	.1092-01	2.527	.4370-03	.3640-01
64	1.0000	107.00	.24378	.1649	7.152	.1237-02	.1031
64	1.0000	108.00	.11682	.6507-01	3.427	.5928-03	.4938-01
64	1.0000	109.00	.47998-01	.1094-01	1.408	.2436-03	.2029-01
64	1.0000	110.00	.13760	.8142-01	4.037	.6983-03	.5817-01
64	1.0000	111.00	.80162-01	.3671-01	2.369	.4098-03	.3414-01
64	1.0000	112.00	.31952-01	.1677-02	.9374	.1621-03	.1351-01
64	1.0000	113.00	.13668-01	-.1134-01	.5771	.9981-04	.8315-02
64	1.0000	114.00	.00000	.0000	.0000	.0000	.0000
0	1.0000	115.00	.000100	.0000	.0000	.0000	.0000
0	1.0000	116.00	.31506	.2210	9.244	.1599-02	.1332
64	1.0000	117.00	.00000	.0000	.0000	.0000	.0000
0	1.0000	118.00	.00000	.0000	.0000	.0000	.0000
64	1.0000	119.00	.42490-02	-.2347-01	1247	.2156-04	.1796-02
0	1.0000	120.00	.00000	.0000	.0000	.0000	.0000
0	1.0000	121.00	.00000	.0000	.0000	.0000	.0000

DATE 03 APR 79

AMES OH58 HEATING AND PRESSURE DATA

0H58 FUSELAGE/ELEVON-PRESSURES ELEVON

PAGE 159
(REX050)

RUN NUMBER	DIM DUMMY	TAP NO	P PSIA	CP	P/PINF	P/PT	P/PT2
64	1.0000	122.00	.88695	.5135	20.15	.3486-02	.2904
64	1.0000	123.00	.76517	.5750	22.45	.3883-02	.3235
64	1.0000	124.00	.90884	.6880	26.66	.4612-02	.3842
64	1.0000	125.00	1.0074	.7656	29.56	.5112-02	.4259
64	1.0000	126.00	1.1077	.8444	32.50	.5621-02	.4683

DATE 03 APR 79

AMES OH58 HEATING AND PRESSURE DATA

OH58 FUSELAGE, ELEVON-PRESURES ELEVON

ELEVON

	RN/FT	MACH	QINF PSI	PINF PSIA	TINF DEG. R	PTAV DEG. R	PT2PT1	ALPHA DEG.	BETA DEG.	PHI DEG.	RHO SLUGS/ FT ³	LENGTH = 14.40
ALPHA = 30.00							.0000	MACH = 7.300				
ELEVON = -10.00							.5000					

TEST CONDITIONS

RUN NUMBER	RN/FT	MACH	QINF PSI	PINF PSIA	TINF DEG. R	PTAV DEG. R	PT2PT1	ALPHA DEG.	BETA DEG.	PHI DEG.	RHO SLUGS/FT ³	LENGTH = 14.40
69	.5036+06	7.300	1.263	.3387-01	181.3	197.1	2010.	.1193-01	.30.00	.0000	.0000	

RUN NUMBER	RN/SEC	VINF	4818.
------------	--------	------	-------

TEST DATA

RUN NUMBER	DIM DUMMY	TAP NO	P PSIA	C _P	P/PINF	P/PT	P/PT2
69	1.0000	101.00	.55383-01	.1703-01	1.635	.2810-03	.2356-01
69	1.0000	102.00	.43751-01	.7825-02	1.292	.2220-03	.1861-01
69	1.0000	103.00	.36331-01	.1951-02	1.073	.1844-03	.1545-01
69	1.0000	104.00	.522714-01	.1492-01	1.557	.2675-03	.2242-01
69	1.0000	105.00	.281186-01	.4496-02	.8323	.1430-03	.1199-01
69	1.0000	106.00	.9233-01	.1158-01	.5679	.9760-04	.8181-02
69	1.0000	107.00	.47319-01	.1065-01	1.397	.2401-03	.2013-01
69	1.0000	108.00	.20136-01	.1087-01	.5946	.1022-03	.8565-02
69	1.0000	109.00	.43620-02	.2335-01	.1288	.2214-04	.1855-02
69	1.0000	110.00	.3412-01	.1943-02	.9275	.1594-03	.1336-01
69	1.0000	111.00	.44467-02	.2329-01	.1313	.2257-04	.1691-02
69	1.0000	112.00	.59561-02	.3152-01	.1757	.3019-04	.2531-02
69	1.0000	113.00	.10254-02	.2762-01	.3028-01	.5203-05	.4361-03
0	1.0000	114.00	.00000	.0000	.0000	.0000	.0000
0	1.0000	115.00	.00000	.0000	.0000	.0000	.0000
69	1.0000	116.00	.10741	.2957	12.03	.2067-02	.1733
0	1.0000	117.00	.00000	.0000	.0000	.0000	.0000
0	1.0000	118.00	.00000	.0000	.0000	.0000	.0000
69	1.0000	119.00	.42825-02	.3020-01	-.1265	.2173-04	.1822-02
0	1.0000	120.00	.00000	.0000	.0000	.0000	.0000
0	1.0000	121.00	.00000	.0000	.0000	.0000	.0000

DATE 03 APR 79

AMES OH-58 HEATING AND PRESSURE DATA

OH-58 FUSELAGE/ELEVON-PRESURES ELEVON

PAGE 161
(R2X051)

RUN NUMBER	DIM DUMMY	TAP NO	P PSIA	CP	P/PINF	P/PT	P/PR2
69	1.0000	122.00	.21610	.1443	6.383	.1097-02	.9195-01
69	1.0000	123.00	.24277	.1654	7.168	.1232-02	.1033
69	1.0000	124.00	.28544	.1991	8.428	.1448-02	.1214
69	1.0000	125.00	.32350	.2293	9.552	.1642-02	.1376
69	1.0000	126.00	.32207	.2281	9.510	.1634-02	.1370

DATE 03 APR 79

AMES OH58 HEATING AND PRESSURE DATA

OH58 FUSELAGE/ELEVON-PRESSURES ELEVON

PAGE 162
(R2X052)

ELEVON

	RN/FT	MACH	QINF PSI	PINF PSIA	BETA RN/L	MACH	LENGTH =
ELEVON					.0000	.0000	14.40
					.7500		

TEST CONDITIONS

RUN NUMBER	RN/FT /FT	MACH	QINF PSI	PINF PSIA	TINF DEG. R	PTAV DEG. R	PT2P1	ALPHA DEG.	BETA DEG.	PHI DEG.	RHO SLUGS/ FT ³
72	.76239-06	7.300	1.890	.5067-01	179.8	294.4	1995.	.1195-01	30.00	.0000	.0000
RUN NUMBER	VINF	FT/SEC									

72 4797.

TEST DATA

RUN NUMBER	DIM DUMMY	TAP NO	P PSIA	CP	P/PINF	P/PT	P/P12
72	1.00000	101.00	19443	.7605-01	3.837	.6654-03	.5528-01
72	1.00000	102.00	19246	.7501-01	3.798	.6537-03	.5471-01
72	1.00000	103.00	16955	.6025-01	3.247	.5389-03	.4678-01
72	1.00000	104.00	18409	.7587-01	3.830	.6593-03	.5518-01
72	1.00000	105.00	15120	.5318-01	2.984	.5136-03	.4295-01
72	1.00000	106.00	10952	.3113-01	2.161	.3720-03	.3114-01
72	1.00000	107.00	18599	.7159-01	3.670	.6318-03	.5288-01
72	1.00000	108.00	13459	.4439-01	2.656	.4572-03	.3826-01
72	1.00000	109.00	76018-01	.1341-01	1.500	.2582-03	.2161-01
72	1.00000	110.00	17090	.6360-01	3.373	.3805-03	.4859-01
72	1.00000	111.00	78610-01	.1478-01	1.551	.2670-03	.2235-01
72	1.00000	112.00	40679-01	-.5228-02	.8028	.1362-03	.1157-01
72	1.00000	113.00	43517-01	-.3795-02	.8588	.1478-03	.1237-01
0	1.00000	114.00	.000000	.00000	.00000	.00000	.00000
0	1.00000	115.00	.000000	.00000	.00000	.00000	.00000
72	1.00000	116.00	48958	.2322	9.662	.1663-02	.1392
0	1.00000	117.00	.00000	.00000	.00000	.00000	.00000
0	1.00000	118.00	.00000	.00000	.00000	.00000	.00000
72	1.00000	119.00	.38766-01	-.66299-02	.7650	.1317-03	.1102-01
0	1.00000	120.00	.00000	.00000	.00000	.00000	.00000
0	1.00000	121.00	.00000	.00000	.00000	.00000	.00000

DATE 03 APR 79

AMES OH58 HEATING AND PRESSURE DATA

OH58 FUSELAGE/ELEVON-PRESSURES ELEVON

PAGE 163
(R2X052)

RUN NUMBER	DIM DUMMY	TAP NO	P PSIA	CP	P/PINF	P/PT	P/PT2
72	1.0000	122.00	.70415	.3457	13.90	.2392-02	.2002
72	1.0000	123.00	.76946	.3803	15.19	.2614-02	.2188
72	1.0000	124.00	.86870	.4328	17.14	.2951-02	.2470
72	1.0000	125.00	.91729	.4585	18.10	.3116-02	.2608
72	1.0000	126.00	.94128	.4712	18.58	.3197-02	.2676

DATE 03 APR 79

AMES OH58 HEATING AND PRESSURE DATA

OH58 FUSELAGE/ELEVON-PRESURES ELEVON

ELEVON

RUN NUMBER	RN/FT /FT	MACH	QINF PSI	PINF PSI	TINF DEG. R	PT PSI	TTAV DEG. R	P/PT1	ALPHA DEG.	BETA DEG.	PHI DEG.	RHO SLUGS/ FT ³
RUN NUMBER	VINF FT/SEC											
62	.7671+06	7.300	1.911	.5123-01	180.4	297.9	2001.	.1194-01	30.00	.0000	.0000	.2383-04
62	4806.											

TEST CONDITIONS

RUN NUMBER	DIM DUMMY	TAP NO	P	CP	P/PINF	P/PT	P/PT2
62	1.0000	101.00	.29357	1269	5.732	.9859-03	.8257-01
62	1.0000	102.00	.27564	1174	5.380	.9254-03	.7750-01
62	1.0000	103.00	.63608	3060	12.41	.2135-02	.1788
62	1.0000	104.00	.49099	1872	7.985	.1373-02	.1150
62	1.0000	105.00	.37147	1676	7.250	.1247-02	.1044
62	1.0000	106.00	.16218	5805-01	3.165	.5445-03	.4560-01
62	1.0000	107.00	.39127	1779	7.637	.1314-02	.1100
62	1.0000	108.00	.21850	8752-01	4.265	.7336-03	.6143-01
62	1.0000	109.00	.11325	3245-01	2.211	.3802-03	.3184-01
62	1.0000	110.00	.25309	1056	4.940	.6497-03	.7116-01
62	1.0000	111.00	.15633	5499-01	3.051	.5248-03	.4396-01
62	1.0000	112.00	.69400-01	9504-02	1.355	.2330-03	.1951-01
62	1.0000	113.00	.47175-01	-2124-02	.9208	.1584-03	.1326-01
62	1.0000	114.00	.00000	.0000	.0000	.0000	.0000
0	1.0000	115.00	.00000	.0000	.0000	.0000	.0000
0	1.0000	116.00	.27591	1176	5.385	.9263-03	.7758-01
62	1.0000	117.00	.00000	.0000	.0000	.0000	.0000
0	1.0000	118.00	.00000	.0000	.0000	.0000	.0000
0	1.0000	119.00	.25463-01	-1348-01	.4970	.8548-04	.7159-02
62	1.0000	120.00	.00000	.0000	.0000	.0000	.0000
0	1.0000	121.00	.00000	.0000	.0000	.0000	.0000

TEST DATA

RUN NUMBER	DIM DUMMY	TAP NO	P	PSIA	CP	P/PINF	P/PT
62	1.0000	101.00	.29357	1269	5.732	.9859-03	.8257-01
62	1.0000	102.00	.27564	1174	5.380	.9254-03	.7750-01
62	1.0000	103.00	.63608	3060	12.41	.2135-02	.1788
62	1.0000	104.00	.49099	1872	7.985	.1373-02	.1150
62	1.0000	105.00	.37147	1676	7.250	.1247-02	.1044
62	1.0000	106.00	.16218	5805-01	3.165	.5445-03	.4560-01
62	1.0000	107.00	.39127	1779	7.637	.1314-02	.1100
62	1.0000	108.00	.21850	8752-01	4.265	.7336-03	.6143-01
62	1.0000	109.00	.11325	3245-01	2.211	.3802-03	.3184-01
62	1.0000	110.00	.25309	1056	4.940	.6497-03	.7116-01
62	1.0000	111.00	.15633	5499-01	3.051	.5248-03	.4396-01
62	1.0000	112.00	.69400-01	9504-02	1.355	.2330-03	.1951-01
62	1.0000	113.00	.47175-01	-2124-02	.9208	.1584-03	.1326-01
62	1.0000	114.00	.00000	.0000	.0000	.0000	.0000
0	1.0000	115.00	.00000	.0000	.0000	.0000	.0000
0	1.0000	116.00	.27591	1176	5.385	.9263-03	.7758-01
62	1.0000	117.00	.00000	.0000	.0000	.0000	.0000
0	1.0000	118.00	.00000	.0000	.0000	.0000	.0000
0	1.0000	119.00	.25463-01	-1348-01	.4970	.8548-04	.7159-02
62	1.0000	120.00	.00000	.0000	.0000	.0000	.0000
0	1.0000	121.00	.00000	.0000	.0000	.0000	.0000

DATE 03 APR 79

AMES 0458 HEATING AND PRESSURE DATA

OH58 FUSELAGE/ELEVON-PRESSURES

ELEVON

RUN NUMBER	DIM DURRY	TAP NO	P PSIA	CP	P/PINF	P/PT	P/PT2
62	1.0000	122.00	1.0530	.5241	20.55	.3535-02	.2961
62	1.0000	123.00	1.1634	.5819	22.71	.3906-02	.3271
62	1.0000	124.00	1.3881	.6995	27.09	.4660-02	.3903
62	1.0000	125.00	1.5320	.7748	29.90	.5143-02	.4308
62	1.0000	126.00	1.6973	.8613	33.13	.5698-02	.4772

PAGE 165
(R2XR53)

DATE 03 APR 79

AMES OH58 HEATING AND PRESSURE DATA

OH58 FUSELAGE/ELEVON-PRESSURES ELEVON

ELEVON

RUN NUMBER	RMN/FT /FT	MACH	QINF PSI	PINF PSI	TINF DEG. R.	PT PSIA	TTAV DEG. R	P12PT1	ALPHA DEG.	BETA DEG.	PHI DEG.	RHO SLUGS/ FT ³
68	.7541+06	7.300	1.898	.5087-01	181.7	296.1	2014.	.1193-01	30.08	.0000	.0000	.2350-04

RUN NUMBER	VINF FT/SEC	4823.
68		

PARAMETRIC DATA

ALPHA = 30.00	BETA = .0000	MACH = .7300	LENGTH = 14.40
ELEVON = -10.00	RNL = .7500		

TEST CONDITIONS

RUN NUMBER	DIM DUMMY	TAP NO	P PSIA	C P	P/PINF	P/PT	P/PT2
68	1.0000	101.00	.98249-01	.2497-01	1.931	.3318-03	.2782-01
68	1.0000	102.00	.92793-01	.2209-01	1.824	.2134-03	.2627-01
68	1.0000	103.00	.77775-01	.1418-01	1.529	.2626-03	.2202-01
68	1.0000	104.00	.11240	.3243-01	2.210	.3796-03	.3183-01
68	1.0000	105.00	.72453-01	.1137-01	1.424	.2447-03	.2052-01
68	1.0000	106.00	.50221-01	.3427-03	.9872	.1695-03	.1422-01
68	1.0000	107.00	.10445	.2824-01	2.053	.3527-03	.2958-01
68	1.0000	108.00	.58008-01	.3761-02	1.140	.1959-03	.1643-01
68	1.0000	109.00	.31435-01	.1024-01	6.179	.1062-03	.8901-02
68	1.0000	110.00	.70718-01	.1046-C1	1.390	.2388-03	.2002-01
68	1.0000	111.00	.28124-01	.1199-01	.5528	.9197-04	.7963-02
68	1.0000	112.00	.16233-01	.1820-01	.3211	.5515-04	.4625-02
68	1.0000	113.00	.22609-01	.1499-01	.4444	.7635-04	.6402-02
0	1.0000	114.00	.00000	.0000	.0000	.0000	.0000
0	1.0000	115.00	.00000	.0000	.0000	.0000	.0000
68	1.0000	116.00	.39660	.1822	7.796	.1339-02	.1123
0	1.0000	117.00	.00000	.0000	.0000	.0000	.0000
0	1.0000	118.00	.00000	.0000	.0000	.0000	.0000
68	1.0000	119.00	.18684-01	.1696-01	.3673	.6309-04	.5290-02
0	1.0000	120.00	.00000	.0000	.0000	.0000	.0000
0	1.0000	121.00	.00000	.0000	.0000	.0000	.0000

TEST DATA

RUN NUMBER	DIM DUMMY	TAP NO	P PSIA	C P	P/PINF	P/PT	P/PT2
68	1.0000	101.00	.98249-01	.2497-01	1.931	.3318-03	.2782-01
68	1.0000	102.00	.92793-01	.2209-01	1.824	.2134-03	.2627-01
68	1.0000	103.00	.77775-01	.1418-01	1.529	.2626-03	.2202-01
68	1.0000	104.00	.11240	.3243-01	2.210	.3796-03	.3183-01
68	1.0000	105.00	.72453-01	.1137-01	1.424	.2447-03	.2052-01
68	1.0000	106.00	.50221-01	.3427-03	.9872	.1695-03	.1422-01
68	1.0000	107.00	.10445	.2824-01	2.053	.3527-03	.2958-01
68	1.0000	108.00	.58008-01	.3761-02	1.140	.1959-03	.1643-01
68	1.0000	109.00	.31435-01	.1024-01	6.179	.1062-03	.8901-02
68	1.0000	110.00	.70718-01	.1046-C1	1.390	.2388-03	.2002-01
68	1.0000	111.00	.28124-01	.1199-01	.5528	.9197-04	.7963-02
68	1.0000	112.00	.16233-01	.1820-01	.3211	.5515-04	.4625-02
68	1.0000	113.00	.22609-01	.1499-01	.4444	.7635-04	.6402-02
0	1.0000	114.00	.00000	.0000	.0000	.0000	.0000
0	1.0000	115.00	.00000	.0000	.0000	.0000	.0000
68	1.0000	116.00	.39660	.1822	7.796	.1339-02	.1123
0	1.0000	117.00	.00000	.0000	.0000	.0000	.0000
0	1.0000	118.00	.00000	.0000	.0000	.0000	.0000
68	1.0000	119.00	.18684-01	.1696-01	.3673	.6309-04	.5290-02
0	1.0000	120.00	.00000	.0000	.0000	.0000	.0000
0	1.0000	121.00	.00000	.0000	.0000	.0000	.0000

DATE 03 APR 79

AMES 0H58 HEATING AND PRESSURE DATA

PAGE 167
(R2X054)

0H58 FUSELAGE/ELEVON-PRESSURES ELEVON						
RUN NUMBER	DIM DUMMY	TAP NO	P PSIA	CP	P/PINF	P/PT
68	1.0000	122.00	.34811	.1566	6.843	.1176-02 .9857-01
68	1.0000	123.00	.38983	.1786	7.663	.1316-02 .1104
68	1.0000	124.00	.46338	.2174	3.109	.1565-02 .1312
68	1.0000	125.00	.51187	.2429	10.06	.1729-02 .1449
68	1.0000	126.00	.51644	.2453	10.15	.1744-02 .1462

DATE 03 APR 79

AMES OH58 HEATING AND PRESSURE DATA

OH58 FUSELAGE/ELEVON-PRESSURES ELEVON

ELEVON

	RN/FT	MACH	QINF PSI	PINF PSIA	TINF DEG. R	PT PSIA	TTAV DEG. R	BETA RN/L	PHI DEG.	PHI DEG.	LENGTH = 14.40
ELEVON											

RUN NUMBER	VINF FT/SEC	ALPHA = 30.00 ELEVON = .0000	MACH = 1.000	LENGTH = 7.300							
71	.1023+07	7.300	.6709-01	178.2	389.2	1979.	.1197-01	30.00	.0000	.0000	.3159-04

TEST CONDITIONS

RUN NUMBER	DIM DUMMY	TAP NO	P PSIA	CP	P/PINF	P/PT	P/PT2
71	1.0000	101.00	.22195	.6188-01	3.308	.5703-03	.4766-01
71	1.0000	102.00	.22054	.6132-01	3.287	.5667-03	.4736-01
71	1.0000	103.00	.20001	.5311-01	2.981	.5139-03	.4295-01
71	1.0000	104.00	.23176	.6580-01	3.455	.5955-03	.4977-01
71	1.0000	105.00	.18520	.4720-01	2.761	.4759-03	.3977-01
71	1.0000	106.00	.12155	.22295-01	1.856	.3200-03	.2675-01
71	1.0000	107.00	.22002	.6111-01	3.280	.5653-03	.4725-01
71	1.0000	108.00	.15945	.3691-01	2.377	.4097-03	.3424-01
71	1.0000	109.00	.83419-01	.6525-02	1.243	.2143-03	.1791-01
71	1.0000	110.00	.21516	.5916-01	3.207	.5528-03	.4620-01
71	1.0000	111.00	.8925-01	.9125-02	1.340	.2311-03	.1931-01
71	1.0000	112.00	.39649-01	-.1096-01	.5910	.1019-03	.8514-02
71	1.0000	113.00	.33978-01	-.1323-01	.5065	.8731-04	.7296-02
0	1.0000	114.00	.00000	.0000	.0000	.0000	.0000
0	1.0000	115.00	.00000	.0000	.0000	.0000	.0000
0	1.0000	116.00	.38270	-.1261	5.704	.9833-03	.8218-01
71	1.0000	117.00	.00000	.0000	.0000	.0000	.0000
0	1.0000	118.00	.00000	.0000	.0000	.0000	.0000
0	1.0000	119.00	.26591-01	-.1618-01	.3963	.6832-04	.5710-02
71	1.0000	120.00	.00000	.0000	.0000	.0000	.0000
0	1.0000	121.00	.00000	.0000	.0000	.0000	.0000

TEST DATA

RUN NUMBER	DIM DUMMY	TAP NO	P PSIA	CP	P/PINF	P/PT	P/PT2
71	1.0000	101.00	.22195	.6188-01	3.308	.5703-03	.4766-01
71	1.0000	102.00	.22054	.6132-01	3.287	.5667-03	.4736-01
71	1.0000	103.00	.20001	.5311-01	2.981	.5139-03	.4295-01
71	1.0000	104.00	.23176	.6580-01	3.455	.5955-03	.4977-01
71	1.0000	105.00	.18520	.4720-01	2.761	.4759-03	.3977-01
71	1.0000	106.00	.12155	.22295-01	1.856	.3200-03	.2675-01
71	1.0000	107.00	.22002	.6111-01	3.280	.5653-03	.4725-01
71	1.0000	108.00	.15945	.3691-01	2.377	.4097-03	.3424-01
71	1.0000	109.00	.83419-01	.6525-02	1.243	.2143-03	.1791-01
71	1.0000	110.00	.21516	.5916-01	3.207	.5528-03	.4620-01
71	1.0000	111.00	.8925-01	.9125-02	1.340	.2311-03	.1931-01
71	1.0000	112.00	.39649-01	-.1096-01	.5910	.1019-03	.8514-02
71	1.0000	113.00	.33978-01	-.1323-01	.5065	.8731-04	.7296-02
0	1.0000	114.00	.00000	.0000	.0000	.0000	.0000
0	1.0000	115.00	.00000	.0000	.0000	.0000	.0000
0	1.0000	116.00	.38270	-.1261	5.704	.9833-03	.8218-01
71	1.0000	117.00	.00000	.0000	.0000	.0000	.0000
0	1.0000	118.00	.00000	.0000	.0000	.0000	.0000
0	1.0000	119.00	.26591-01	-.1618-01	.3963	.6832-04	.5710-02
71	1.0000	120.00	.00000	.0000	.0000	.0000	.0000
0	1.0000	121.00	.00000	.0000	.0000	.0000	.0000

DATE 03 APR 79

AMES 0H58 HEATING AND PRESSURE DATA

0H58 FUSELAGE/ELEVON-PRESSURES

ELEVON

RUN NUMBER	DIM DUMMY	TAP NO	P PSIA	CP	P/PINF	P/PT	P/PT2
71	1.0000	122.00	.96731	.3437	13.82	.2383-02	.1991
71	1.0000	123.00	1.0125	.3778	15.09	.2602-02	.2174
71	1.0000	124.00	1.1663	.4392	17.38	.2997-02	.2505
71	1.0000	125.00	1.2166	.4593	18.13	.3126-02	.2613
71	1.0000	126.00	1.2596	.4765	18.77	.3236-02	.2705

PAGE 169
(R2X055)

DATE 03 APR 79

AMES CH58 HEATING AND PRESSURE DATA

CH58 FUSELAGE/ELEVON-PRESSURES ELEVON

ELEVON

RUN NUMBER	RM/FT /FT	MACH	QINF PS1	PINF PS1A	TINF DEG. R	PT PSIA	TTAV DEG. R	PI2PT1	ALPHA DEG.	BETA DEG.	PHI DEG.	RHO SLUGS/ FT ³
61	.1034+07	7.300	2.479	.6647-01	175.8	384.6	1954.	.1199-01	30.00	.0000	.0000	.3173-04
RUN NUMBER	VINF FT/SEC											
61	4744.											

PARAMETRIC DATA

ELEVON	ALPHA = 30.00	BETA RN/L	MACH = 7.300	LENGTH = 14.40
	10.00	1.000		

TEST CONDITIONS

RUN NUMBER	DIM DUMMY	TAP NO	P PSIA	CP	P/PINF	P/PT	P/PT2
61	1.0000	101.00	.398874	.1340	5.999	.1037-02	.8644-01
61	1.0000	102.00	.36865	.1219	5.546	.9584-03	.7991-01
61	1.0000	103.00	.86117	.3205	12.96	.2239-02	.1867
61	1.0000	104.00	.54640	.1935	8.221	.1421-02	.1184
61	1.0000	105.00	.49559	.1690	7.306	.1262-02	.1053
61	1.0000	106.00	.20855	.5731-01	3.138	.5422-03	.4521-01
61	1.0000	107.00	.51875	.1824	7.805	.1349-02	.1125
61	1.0000	108.00	.28819	.8942-01	4.3305	.7192-03	.6247-01
61	1.0000	109.00	.14913	.3337-01	2.244	.3877-03	.3233-01
61	1.0000	110.00	.34696	.1131	5.220	.9020-03	.7521-01
61	1.0000	111.00	.20937	.5763-01	3.150	.5443-03	.4539-01
61	1.0000	112.00	.10146	.1411-01	1.526	.2638-03	.2199-01
61	1.0000	113.00	.59519-01	-.2893-02	.8925	.1542-03	.1286-01
0	1.0000	114.00	.00000	.00000	.0000	.0000	.0000
0	1.0000	115.00	.00000	.00000	.0000	.0000	.0000
61	1.0000	116.00	.24491	.7197-01	3.685	.6367-03	.5309-01
0	1.0000	117.00	.00000	.00000	.0000	.0000	.0000
0	1.0000	118.00	.00000	.00000	.0000	.0000	.0000
61	1.0000	119.00	.32061-01	-.1388-01	.4824	.8335-04	.6950-02
0	1.0000	120.00	.00000	.00000	.0000	.0000	.0000
0	1.0000	121.00	.00000	.00000	.0000	.0000	.0000

TEST DATA

DATE 03 APR 79

AMES OH-58 HEATING AND PRESSURE DATA

OH-58 FUSELAGE/ELEVON-PRESSURES ELEVON

RUN NUMBER	DIM DUMMY	TAP NO	P PSIA	CP	P/PINF	P/PT	P/PT2
61	1.0000	122.00	1.3647	.5236	20.53	.3548-02	.2958
61	1.0000	123.00	1.5136	.5836	22.77	.3935-02	.3281
61	1.0000	124.00	1.8181	.7064	27.35	.4727-02	.3941
61	1.0000	125.00	1.9984	.7752	29.92	.5170-02	.4310
61	1.0000	126.00	2.2022	.8614	33.13	.5725-02	.4774

PAGE 171
(R2XD56)

DATE 03 APR 79

AMES 0458 HEATING AND PRESSURE DATA

CH58 FUSELAGE/ELEVON-PRESURES ELEVON

PAGE 172
(R2XD57)

ELEVON	RN/FT	MACH	QINF PSI	PINF PSIA	TINF DEG. R	PT PSIA	TTAV DEG. R	PARAMETRIC DATA
								ALPHA = 30.00 ELEVON = -10.00
								BETA RN/L
								0000 1.000
								MACH
								7.300
								LENGTH = 14.40

RUN NUMBER	RN/FT	MACH	QINF PSI	PINF PSIA	TINF DEG. R	PT PSIA	TTAV DEG. R	PARAMETRIC DATA
67	.1018+07	7.300	2.505	.6714-01	178.8	389.7	1985.	ALPHA = .1196-01 BETA = .30.00 ELEVON = -.10.00
RUN NUMBER	VINF FT/SEC							PHI DEG. .0000
67	4785.							RHO SLUGS/ FT ³ .3150-04

TEST CONDITIONS

RUN NUMBER	DIM DUMMY	TAP NO	P PSIA	CP	P/PINF	P/PT	P/PT2
67	1.0000	101.00	.12076	.2141-01	1.799	.3099-03	.2591-01
67	1.0000	102.00	.10266	.1418-01	1.529	.2634-03	.2203-01
67	1.0000	103.00	.92052-01	.9946-02	1.371	.2362-03	.1975-01
67	1.0000	104.00	.14836	.3243-01	2.210	.3807-03	.3183-01
67	1.0000	105.00	.91927-01	.9896-02	1.369	.2359-03	.1972-01
67	1.0000	106.00	.53681-01	.5374-02	.7995	.1377-03	.1152-01
67	1.0000	107.00	.12420	.2278-01	1.850	.3187-03	.2665-01
67	1.0000	108.00	.71967-01	.1927-02	1.072	.1847-03	.1544-01
67	1.0000	109.00	.28324-01	.1550-01	.4219	.7268-04	.6077-02
67	1.0000	110.00	.83112-01	.6377-02	1.238	.2133-03	.1783-01
67	1.0000	111.00	.31823-01	.1410-01	.4740	.8166-04	.6828-02
67	1.0000	112.00	.19844-01	.1888-01	.2956	.5092-04	.4258-02
67	1.0000	113.00	.16934-01	.2005-01	.2522	.4345-04	.3634-02
0	1.0000	114.00	.00000	.0000	.0000	.0000	.0000
0	1.0000	115.00	.00000	.0000	.0000	.0000	.0000
67	1.0000	116.00	.21405	.5866-01	3.188	.5492-03	.4593-01
0	1.0000	117.00	.00000	.0000	.0000	.0000	.0000
0	1.0000	118.00	.00000	.0000	.0000	.0000	.0000
67	1.0000	119.00	.96162-02	.2297-01	1.432	.2467-04	.2063-02
0	1.0000	120.00	.00000	.0000	.0000	.0000	.0000
0	1.0000	121.00	.00000	.0000	.0000	.0000	.0000

TEST DATA

DATE 03 APR 79

AMES OH58 HEATING AND PRESSURE DATA

OH58 FUSELAGE/ELEVON-PRESSURES ELEVON

PAGE 173
(R2X057)

RUN NUMBER	DIM DURRY	TAP NO	P PSIA	CP	P/PINF	P/P1	P/P2
67	1.0000	122.00	.44888	.1524	6.686	.1152-02	.9632-01
67	1.0000	123.00	.49934	.1726	7.437	.1281-02	.1071
67	1.0000	124.00	.60287	.2139	8.979	.1547-02	.1294
67	1.0000	125.00	.66630	.2392	9.924	.1710-02	.1430
67	1.0000	126.00	.68805	.2479	10.25	.1765-02	.1476

DATE 03 APR 79

AMES OH58 HEATING AND PRESSURE DATA

OH58 FUSELAGE/ELEVON-PRESSURES ELEVON

PAGE 174
(R2X058)

ELEVON

ALPHA = 30.00
ELEVON = .0000BETA
RN/L = .0000

MACH = 1.500

PARAMETRIC DATA

PHI
DEG. = 14.40RHO
SLUGS/
FT³

.4632-04

TEST CONDITIONS

RUN NUMBER	RN/FT	MACH	QINF PSI	PINF PSIA	TINF DEG. R	PTA DEG. R	PTPTI	ALPHA DEG.	BETA DEG.	PHI DEG.	RHO SLUGS/ FT ³
70	.1482+07	7.300	3.766	.1010	182.9	588.4	2026.	.1191-01	.30.00	.0000	.0000

RUN NUMBER	DIM DUMMY	TAP NO	P PSIA	C PSIA	P/PINF	P/PT	P/PT2
70	1.0000	101.00	.32078	.5837-01	3.177	.5452-03	.4577-01
70	1.0000	102.00	.31112	.5581-01	3.082	.5288-03	.4439-01
70	1.0000	103.00	.29275	.5093-01	2.900	.4975-03	.4177-01
70	1.0000	104.00	.32574	.5969-01	3.227	.5536-03	.4647-01
70	1.0000	105.00	.27690	.4672-01	2.743	.4706-03	.3951-01
70	1.0000	106.00	.18537	.2241-01	1.836	.3150-03	.2645-01
70	1.0000	107.00	.30938	.5535-01	3.065	.5258-03	.4414-01
70	1.0000	108.00	.24120	.3724-01	2.399	.4099-03	.3441-01
70	1.0000	109.00	.12677	.6856-02	1.256	.2155-03	.1809-01
70	1.0000	110.00	.31653	.5725-01	3.135	.5380-03	.4516-01
70	1.0000	111.00	.17241	.0352-02	1.312	.2250-03	.1889-01
70	1.0000	112.00	.59586-01	-.1098-01	.5902	.1013-03	.8501-02
70	1.0000	113.00	.47783-01	-.1412-01	.4733	.8121-04	.6817-02
0	1.0000	114.00	.00000	.0000	.0000	.0000	.0000
0	1.0000	115.00	.00000	.0000	.0000	.0000	.0000
70	1.0000	116.00	.46331	.9622-01	4.589	.7874-03	.6610-01
0	1.0000	117.00	.00000	.0000	.0000	.0000	.0000
0	1.0000	118.00	.00000	.0000	.0000	.0000	.0000
70	1.0000	119.00	.37205-01	-.1693-01	.3685	.6323-04	.5308-02
0	1.0000	120.00	.00000	.0000	.0000	.0000	.0000
0	1.0000	121.00	.00000	.0000	.0000	.0000	.0000
0	0	0					

70 4839.

TEST DATA

RUN NUMBER	DIM DUMMY	TAP NO	P PSIA	C PSIA	P/PINF	P/PT	P/PT2
70	1.0000	101.00	.32078	.5837-01	3.177	.5452-03	.4577-01
70	1.0000	102.00	.31112	.5581-01	3.082	.5288-03	.4439-01
70	1.0000	103.00	.29275	.5093-01	2.900	.4975-03	.4177-01
70	1.0000	104.00	.32574	.5969-01	3.227	.5536-03	.4647-01
70	1.0000	105.00	.27690	.4672-01	2.743	.4706-03	.3951-01
70	1.0000	106.00	.18537	.2241-01	1.836	.3150-03	.2645-01
70	1.0000	107.00	.30938	.5535-01	3.065	.5258-03	.4414-01
70	1.0000	108.00	.24120	.3724-01	2.399	.4099-03	.3441-01
70	1.0000	109.00	.12677	.6856-02	1.256	.2155-03	.1809-01
70	1.0000	110.00	.31653	.5725-01	3.135	.5380-03	.4516-01
70	1.0000	111.00	.17241	.0352-02	1.312	.2250-03	.1889-01
70	1.0000	112.00	.59586-01	-.1098-01	.5902	.1013-03	.8501-02
70	1.0000	113.00	.47783-01	-.1412-01	.4733	.8121-04	.6817-02
0	1.0000	114.00	.00000	.0000	.0000	.0000	.0000
0	1.0000	115.00	.00000	.0000	.0000	.0000	.0000
70	1.0000	116.00	.46331	.9622-01	4.589	.7874-03	.6610-01
0	1.0000	117.00	.00000	.0000	.0000	.0000	.0000
0	1.0000	118.00	.00000	.0000	.0000	.0000	.0000
70	1.0000	119.00	.37205-01	-.1693-01	.3685	.6323-04	.5308-02
0	1.0000	120.00	.00000	.0000	.0000	.0000	.0000
0	1.0000	121.00	.00000	.0000	.0000	.0000	.0000
0	0	0					

DATE 03 APR 79

AMES OH58 HEATING AND PRESSURE DATA

OH58 FUSELAGE/ELEVON-PRESSURES ELEVON

RUN NUMBER	DIM DUMMY	TAP NO	P PSIA	CP	P/PINF	P/PT	I /P12
70	1.0000	122.00	1.3819	.3409	13.72	.2354-02	.1976
70	1.0000	123.00	1.5039	.3726	14.90	.2556-02	.2116
70	1.0000	124.00	1.7220	.4304	17.05	.2927-02	.2457
70	1.0000	125.00	1.8111	.4541	17.94	.3079-02	.2584
70	1.0000	126.00	1.8636	.4680	18.46	.3167-02	.2659

PAGE 175
(R2XD58)

DATE 03 APR 79

AMES OH58 HEATING AND PRESSURE DATA
OH58 FUSELAGE/ELEVON-PRESSURES ELEVON

PAGE 176
(R2XD59)

ELEVON		ALPHA = 30.00	BETA RNL = 0.000	MACH = 7.300	LENGTH = 14.40						
RUN NUMBER	RN/FT /FT	MACH	QINF PSI	TINF DEG. R	PT2FT1 DEG. R	ALPHA DEG.	BETA DEG.	PHI DEG.	RHO SLUGS/ FT ³		
63	.1482*07	7.300	3.756	.1007	182.6	586.7	2023.	.1192*01	.30.00	.0000	.0000
RUN NUMBER	VINF FT/SEC										
63	4834.										

TEST CONDITIONS

RUN NUMBER	DIM DUMMY	TAP NO	P PSIA	C P	P/PINF	P/PIT	P/PT2
63	1.0000	101.00	.57512	.1263	5.711	.9803*03	.8226*01
63	1.0000	102.00	.52093	.1119	5.173	.8879*03	.7451*01
63	1.0000	103.00	.13602	.3353	13.51	.2318*02	.1946
63	1.0000	104.00	.81040	.1889	8.048	.1381*02	.1159
63	1.0000	105.00	.73034	.1676	7.253	.1245*02	.1045
63	1.0000	106.00	.30513	.54442*01	3.030	.5201*03	.4364*01
63	1.0000	107.00	.77829	.1804	7.729	.1327*02	.1113
63	1.0000	108.00	.42506	.8635*01	4.221	.7245*03	.6080*01
63	1.0000	109.00	.21898	.3149*01	2.175	.3732*03	.3132*01
63	1.0000	110.00	.51542	.1104	5.118	.8785*03	.7373*01
63	1.0000	111.00	.30218	.5364*01	3.001	.5150*03	.4322*01
63	1.0000	112.00	.13030	.7881*02	1.291	.2221*03	.1864*01
63	1.0000	113.00	.76923*01	.6330*02	.7639	.1311*03	.1100*01
63	1.0000	114.00	.00000	.0000	.0000	.0000	.0000
0	1.0000	115.00	.00000	.0000	.0000	.0000	.0000
0	1.0000	116.00	.35150	.6677*01	3.491	.5911*03	.5028*01
63	1.0000	117.00	.00000	.0000	.0000	.0000	.0000
0	1.0000	118.00	.00000	.0000	.0000	.0007	.0000
0	1.0000	119.00	.40165*01	-.1612*01	.3989	.6846*04	.5745*02
63	1.0000	120.00	.00000	.0000	.0000	.0000	.0000
0	1.0000	121.00	.00000	.0000	.0000	.0000	.0000
1.	1.0000	0					

TEST DATA

RUN NUMBER	DIM DUMMY	TAP NO	P PSIA	C P	P/PINF	P/PIT	P/PT2
63	1.0000	101.00	.57512	.1263	5.711	.9803*03	.8226*01
63	1.0000	102.00	.52093	.1119	5.173	.8879*03	.7451*01
63	1.0000	103.00	.13602	.3353	13.51	.2318*02	.1946
63	1.0000	104.00	.81040	.1889	8.048	.1381*02	.1159
63	1.0000	105.00	.73034	.1676	7.253	.1245*02	.1045
63	1.0000	106.00	.30513	.54442*01	3.030	.5201*03	.4364*01
63	1.0000	107.00	.77829	.1804	7.729	.1327*02	.1113
63	1.0000	108.00	.42506	.8635*01	4.221	.7245*03	.6080*01
63	1.0000	109.00	.21898	.3149*01	2.175	.3732*03	.3132*01
63	1.0000	110.00	.51542	.1104	5.118	.8785*03	.7373*01
63	1.0000	111.00	.30218	.5364*01	3.001	.5150*03	.4322*01
63	1.0000	112.00	.13030	.7881*02	1.291	.2221*03	.1864*01
63	1.0000	113.00	.76923*01	.6330*02	.7639	.1311*03	.1100*01
63	1.0000	114.00	.00000	.0000	.0000	.0000	.0000
0	1.0000	115.00	.00000	.0000	.0000	.0000	.0000
0	1.0000	116.00	.35150	.6677*01	3.491	.5911*03	.5028*01
63	1.0000	117.00	.00000	.0000	.0000	.0000	.0000
0	1.0000	118.00	.00000	.0000	.0000	.0007	.0000
0	1.0000	119.00	.40165*01	-.1612*01	.3989	.6846*04	.5745*02
63	1.0000	120.00	.00000	.0000	.0000	.0000	.0000
1.	1.0000	0					

DATE 03 APR 79

AMES OH58 HEATING AND PRESSURE DATA

PAGE 177
(R2X059)

OH58 FUSELAGE/ELEVON-PRESSURES ELEVON						
RUN NUMBER	DIM DUMY	TAP NO	P PSIA	CP	P/P1NF	P/P1
63	1.00000	122.00	2.0990	.5320	20.84	.3578-02
63	1.00000	123.00	2.3169	.5900	23.01	.3949-02
63	1.00000	124.00	2.7778	.7127	27.58	.4735-02
63	1.00000	125.00	3.0416	.7829	30.21	.5184-02
63	1.00000	126.00	3.3877	.8750	33.64	.5774-02

DATE 03 APR 79

AMES OH58 HEATING AND PRESSURE DATA

OH58 FUSELAGE/ELEVON-PRESSURES ELEVON

PAGE 178
(R2XD60)

ELEVON	RN/FT NUMBER	MACH	QINF PSI	PINF PSIA	ALPHA = 30.00 ELEVON = -10.00	BETA RNL	0000 1.500	MACH = 7.300	LENGTH = 14.40			
	66	.1440-07	7.300	3.708	.9941-01	184.5	580.4	2043.	.1189-01	30.00	.0000	.0000

TEST CONDITIONS

RUN NUMBER	RN/FT NUMBER	MACH	QINF PSI	PINF PSIA	TINF DEG. R	PT PSIA	TTAV DEG. R	PTAPT1	ALPHA DEG.	BETA DEG.	PHI DEG.	RHO SLUGS/ FT3
66	66	.1440-07	7.300	3.708	.9941-01	184.5	580.4	2043.	.1189-01	30.00	.0000	.4520-04

4861.

TEST DATA

RUN NUMBER	DIM DUMMY	TAP NO	P PSIA	CP	P/PINF	P/PT	P/PT2
66	1.0000	101.00	.19334	.2533-01	1.915	.3331-03	.2801-01
66	1.0000	102.00	.18085	.2196-01	1.819	.3116-03	.2620-01
66	1.0000	103.00	.15845	.1592-01	1.594	.2730-03	.2296-01
66	1.0000	104.00	.24630	.3961-01	2.478	.4244-03	.3568-01
66	1.0000	105.00	.17199	.1957-01	1.730	.2963-03	.2492-01
66	1.0000	106.00	.11450	.4069-02	1.152	.1973-03	.1659-01
66	1.0000	107.00	.20658	.2890-01	2.078	.3559-03	.2993-01
66	1.0000	108.00	.13732	.1022-01	1.381	.2366-03	.1989-01
66	1.0000	109.00	.74079-01	.6832-02	.7452	.1276-03	.1073-01
66	1.0000	110.00	.14809	.1312-01	1.490	.2551-03	.2145-01
66	1.0000	111.00	.75310-01	.6500-02	.7575	.1298-03	.1091-01
66	1.0000	112.00	.54031-01	-.1224-01	.5435	.9310-04	.7828-02
66	1.0000	113.00	.50571-01	-.1317-01	.5087	.8713-04	.7326-02
0	0	114.00	.00000	.00000	.0000	.0000	.0000
0	0	115.00	.00000	.00000	.0000	.0000	.0000
66	1.0000	116.00	.37930	-.7547-01	3.815	.6335-03	.5495-01
0	0	117.00	.00000	.00000	.0000	.0000	.0000
0	0	118.00	.00000	.00000	.0000	.0000	.0000
66	1.0000	119.00	.45096-01	-.1465-01	.4535	.7768-04	.6532-02
0	0	120.00	.00000	.00000	.0000	.0000	.0000
0	0	121.00	.00000	.00000	.0000	.0000	.0000

DATE 03 APR 79

AMES OH58 HEATING AND PRESSURE DATA

OH58 FUSELAGE/ELEVON-PRESSURES ELEVON

RUN NUMBER	DIM DUMMY	T:P NO	P PSIA	CP	P/PINF	P/PT	P/PT2
66	1.0000	122.00	.70504	.1633	7.092	.1215-02	.1021
66	1.0000	123.00	.77516	.1822	7.797	.1336-02	.1123
66	1.0000	124.00	.93722	.2259	9.427	.1615-02	.1358
66	1.0000	125.00	1.0404	.2538	10.47	.1793-02	.1507
66	1.0000	126.00	1.0699	.2617	10.76	.1843-02	.1550

PAGE 179
(R2X060)

DATE 03 APR 79

AMES OH58 HEATING AND PRESSURE DATA

OH58 ELEVON-PRESSURES

FLAT PLATE

FLAT PLATE

	ALPHA = 30.00	BETA R/N/L = .0000	MACH = 7.300	LENGTH = 7.800
ELEVON = .00000	.50000			

TEST CONDITIONS

RUN NUMBER	RN/FT /FT	MACH	QINF PS1	PINF PSIA	TINF DEG. R	PT PSIA	TTAV DEG. R	P12P11	ALPHA DEG.	BETA DEG.	PHI DEG.	RHO SLUGS/ FT ³	1517-04
46	.4816+06	7.300	1.255	.3364-01	186.1	196.7	2058.	.1188-01	30.00	.0000	.0000		

RUN NUMBER	VINF FT/SEC	Y	X
46	4.881.		

TEST DATA

RUN NUMBER	X	Y	TAP NO	P PSIA	CP	P/PINF	P/PT	P/PT2
46	.00000	7.3000	179.00	.8425	.6446	.25.04	.4283-02	.3607
46	.25000	.90000	168.00	.9462	.7272	.28.13	.4811-02	.4051
46	.25000	1.5000	169.00	.9208	.7070	.27.37	.4682-02	.3942
46	.25000	1.8750	170.00	.9047	.6942	.26.89	.4600-02	.3873
46	.25000	3.0000	171.00	.9049	.6944	.26.90	.4601-02	.3874
46	.25000	3.9000	172.00	.9126	.7005	.27.13	.4640-02	.3907
46	.25000	5.8500	173.00	.8740	.6697	.25.98	.4444-02	.3742
46	.25000	6.3000	177.00	.8452	.6468	.25.13	.4297-02	.3619
46	.25000	6.9000	178.00	.8720	.6681	.25.92	.4433-02	.3733

DATE 03 APR 79

AMES OH58 HEATING AND PRESSURE DATA

PAGE 181
(R2XE33)

OH58 ELEVON/ELEVON-PRESSURES

FLAT PLATE

ALPHA = 30.00
ELEVON = 5.000
R/N/L = .5000
MACH = 7.300
LENGTH = 7.800

TEST CONDITIONS

RUN NUMBER	RN/FT /FT	MACH	QINF PSI	PINF PSIA	TINF DEG. R	PTAV DEG. R	PTEPT1	ALPHA DEG.	BETA DEG.	PHI DEG.	RHO SLUGS/ FT ³
49	.5016+06	7.300	1.243	.3332-01	179.8	193.6	.1195-01	30.00	.0000	.0000	.1555-04

RUN VINF
NUMBER FT/SEC
49 4797.

TEST DATA

RUN NUMBER	X	Y	Z	TAP NO	P PSIA	CP	P/PINF	P/PT	P/PT2
49	.00000	7.3000	179.00	.8456	.6535	25.38	.4368-02	.3656	
49	.25000	.90000	168.00	.0000	.0000	.0000	.0000	.0000	
49	.25000	1.5000	169.00	.9177	.7115	27.54	.4740-02	.3967	
49	.25000	1.8750	170.00	.9039	.7004	27.13	.4669-02	.3908	
49	.25000	3.0000	171.00	.9050	.7021	27.19	.4680-02	.3917	
49	.25000	3.9000	172.00	.9094	.7048	27.29	.4698-02	.3932	
49	.25000	5.8500	173.00	.8743	.6766	26.24	.4516-02	.3780	
49	.25000	6.3000	177.00	.8441	.6523	25.33	.4360-02	.3649	
49	.25000	6.9000	178.00	.8723	.6749	26.18	.4506-02	.3771	

DATE 03 APR 79

AMES OH58 HEATING AND PRESSURE DATA

PAGE 182
(R2XE34)

OH58 ELEVON/ELEVON-PRESSURES FLAT PLATE FLAT PLATE

FLAT PLATE

ALPHA = 30.00 BETA = .0000 MACH = 7.300 LENGTH = 7.800

ELEVON = -10.00 R/V/L = .50000

RUN NUMBER	R/V/FT /FT	MACH	P _{INF} PSI	T _{INF} DEG. R	P _T PSIA	T _{TAV} DEG. R	P _{2P1}	ALPHA DEG.	BETA DEG.	PHI DEG.	RHO SLUGS/ FT ³
54	.5043+06	7.300	1.234	.3309-01	178.3	192.0	1980.	.1196-01	30.00	.0000	.1558-04

RUN V_{INF}
NUMBER FT/SEC

54 4777.

TEST CONDITIONS

ALPHA = 30.00 BETA = .0000 MACH = 7.300 LENGTH = 7.800

ELEVON = -10.00 R/V/L = .50000

TEST DATA

RUN NUMBER	X	Y	Z	TAP NO	P PS1A	C _P	P/P _{INF}	P/P _T	P/P _{T2}
54	00000	7.3000	179.00	.8167	.6348	24.68	.4254-02	.3556	.0000
54	.25000	.90000	168.00	.0000	.0000	.0000	.0000	.0000	.0000
54	.25000	1.5000	169.00	.8848	.6899	26.74	.4609-02	.3852	.0000
54	.25000	1.8750	170.00	.8706	.6784	26.31	.4535-02	.3790	.0000
54	.25000	3.0000	171.00	.8668	.6754	26.20	.4515-02	.3774	.0000
54	.25000	3.9000	172.00	.8749	.6819	26.44	.4557-02	.3809	.0000
54	.25000	5.8500	173.00	.8492	.6611	25.66	.4423-02	.3697	.0000
54	.25000	6.3000	177.00	.8140	.6326	24.60	.4240-02	.3544	.0000
54	.25000	6.9000	178.00	.8364	.6507	25.27	.4357-02	.3641	.0000

DATE 03 APR 79

AMES OH58 HEATING AND PRESSURE DATA

OH58 ELEVON/ELEVON-PRESSURES

FLAT PLATE

ALPHA = 30.00
ELEVON = .0000
RNL = .7500
MACH = 7.300
LENGTH = 7.800

TEST CONDITIONS

RUN NUMBER	RN/FT /FT	MACH	QINF PSI	PINF PSIA	TINF DEG. R	PT DEG. R	TTAV DEG. R	PT2PT1	ALPHA DEG.	BETA DEG.	PHI DEG.	RHO SLUGS/ FT ³
47	.7225*06	7.300	1.856	.4976-01	181.3	290.4	2040.	.1190-01	30.00	.0000	.0000	.2266-04

RUN NUMBER VINF FT/SEC
47 .4857.

TEST DATA

RUN NUMBER	Y	X	TAP NO	P PSIA	C _P	P/PINF	P/PT	P/PT2
47	.00000	7.30000	179.00	1.287	.6667	.25.87	.4432-02	.3726
47	.25000	.90000	168.00	1.406	.7307	.28.26	.4641-02	.4070
47	.25000	1.50000	169.00	1.405	.7304	.28.25	.4640-02	.4068
47	.25000	1.8750	170.00	1.387	.7207	.27.88	.4778-02	.4016
47	.25000	3.0000	171.00	1.368	.7103	.27.50	.4711-02	.3960
47	.25000	3.9000	172.00	1.360	.7167	.27.74	.4752-02	.3995
47	.25000	5.8500	173.00	1.339	.6947	.26.91	.4611-02	.3876
47	.25000	6.3000	177.00	1.282	.6639	.25.76	.4414-02	.3711
47	.25000	6.9000	178.00	1.325	.6870	.26.63	.4562-02	.3835

DATE 03 APR 79

AMES OH58 HEATING AND PRESSURE DATA

OH58 ELEVON/ELEVON-PRESSURES

FLAT PLATE

	RN/FT NUMBER	MACH	QINF PSI	PINF PSIA	TINF DEG. R	PT PSIA	TTAV DEG. R	BETA RN/L	MACH	PARAMETRIC DATA
										LENGTH = 7.800
50	.7776+06	7.300	1.912	.5125-01	178.8	297.5	1985.	.0000	.7300	
RUN NUMBER	VINF FT/SEC							.7500		
50	4785.									

TEST CONDITIONS

RN	RN/FT	MACH	QINF PSI	PINF PSIA	TINF DEG. R	PT PSIA	TTAV DEG. R	BETA RN/L	MACH	PARAMETRIC DATA
50	.7776+06	7.300	1.912	.5125-01	178.8	297.5	1985.	.0000	.7300	LENGTH = 7.800
RUN NUMBER	VINF FT/SEC							.7500		
50	4785.									

TEST DATA

RUN NUMBER	X	Y	Z	TAP NO	P PSIA	CP	P/PINF	P/P	P/P12
50	.00000	7.3000	179.00	1.317	.6621	25.70	.4428-02	.3702	
50	.25000	.90000	168.00	.0000	.0000	.0000	.0000	.0000	
50	.25000	1.5000	169.00	1.434	.7235	27.99	.4822-02	.4032	
50	.25000	1.8750	170.00	1.418	.7148	27.66	.4766-02	.3986	
50	.25000	3.0000	171.00	1.394	.7024	27.20	.4687-02	.3919	
50	.25000	3.9000	172.00	1.405	.7079	27.41	.4722-02	.3949	
50	.25000	5.8500	173.00	1.367	.6895	26.68	.4597-02	.3844	
50	.25000	6.3000	177.00	1.301	.6537	25.38	.4373-02	.3657	
50	.25000	6.9000	178.00	1.352	.6802	26.37	.4544-02	.3799	

DATE 03 APR 79

AMES OH58 HEATING AND PRESSURE DATA

OH58 ELEVON/ELEVON-PRESURES

PAGE 185
(R2XE37)

FLAT PLATE

ALPHA = 30.00
ELEVON = -10.00
RNL = .7500
MACH = 7.300
LENGTH = 7.800

TEST CONDITIONS

RUN NUMBER	RN/FT /FT	MACH	QINF PSI	PINF PSI	TINF DEG. R	PT	TTAV DEG. R	PTAPT1	ALPHA DEG.	BETA DEG.	PHI DEG.	RHO SLUGS/ FT3
53	.7726+06	7.300	1.862	.4993-01	176.4	289.1	1961.	.1199-01	30.00	.0000	.0000	.2375-04

RUN VINF
NUMBER FT/SEC
53 4752.

TEST DATA

RUN NUMBER	X	Y	Z	TAP NO	P PSIA	CP	P/PINF	P/PT	P/PT2
53	.00000	7.3000		179.00	1.189	.6116	23.81	.4113-02	.3431
53	.25000	.90000		168.00	.0000	.0000	.0000	.0000	.0000
53	.25000	1.50000		169.00	1.298	.6700	25.99	.4489-02	.3745
53	.25000	1.8750		170.00	1.278	.6591	25.59	.4419-02	.3687
53	.25000	3.00000		171.00	1.269	.6516	25.42	.4390-02	.3662
53	.25000	3.90000		172.00	1.281	.6610	25.66	.4431-02	.3696
53	.25000	5.85000		173.00	1.239	.6382	24.81	.4284-02	.3574
53	.25000	6.30000		177.00	1.193	.6140	23.90	.4128-02	.3444
53	.25000	6.90000		178.00	1.232	.6345	24.67	.4260-02	.3554

DATE 03 APR 79

AMES OH5B HEATING AND PRESSURE DATA

OH5B ELEVON/ELEVON-PRESSURES

FLAT PLATE

PAGE 186
(R2XE38)

FLAT PLATE

PARAMETRIC DATA

ALPHA	=	30.00	BETA	=	0000	MACH	=	7.300
ELEVON	=	.0000	R/N/L	=	1.000			LENGTH = 7.800

TEST CONDITIONS

RUN NUMBER	RN/FT	MACH	QINF PSI	PINF PSIA	TINF DEG. R	PT2PT1 DEG.	ALPHA DEG.	BETA DEG.	PHI DEG.	RHO SLUGS/ FT ³	
48	.1017+07	7.300	2.488	.6670-01	178.2	386.9	1979.	.1197-01	30.00	.0000	.0000

RUN NUMBER	VINF FT/SEC
48	4776.

TEST DATA

RUN NUMBER	X	X	TAP NO	P PSIA	CP	P/PINF	P/PT	P/PT2
48	0.00000	7.3000	179.00	1.617	.6230	24.24	.4179-02	.3492
48	.25000	.90000	168.00	.0000	.0000	.0000	.0000	.0000
48	.25000	1.5000	169.00	1.769	.6843	26.52	.4573-02	.3821
48	.25000	1.8750	170.00	1.752	.6774	26.27	.4529-02	.3785
48	.25000	3.0000	171.00	1.725	.6664	25.86	.4458-02	.3725
48	.25000	3.9000	172.00	1.741	.6728	26.10	.4499-02	.3760
48	.25000	5.8500	173.00	1.687	.6511	25.29	.4359-02	.3643
48	.25000	6.3000	177.00	1.617	.6231	24.24	.4179-02	.3493
48	.25000	6.9000	178.00	1.677	.6473	25.15	.4335-02	.3623

DATE 03 APR 79

AMES 0458 HEATING AND PRESSURE DATA

0458 ELEVON/ELEVON-PRESSURES FLAT PLATE

PAGE 187
(R2XE39)

FLAT PLATE

	RN/FT	MACH	QINF PSI	PINF PSIA	TINF DEG. R	PT PSIA	TAV DEG. R	PI2P1	ALPHA DEG.	BETA DEG.	LENGTH = 7.800
											RHO SLUGS/ FT ³ .3165-04

TEST CONDITIONS

RUN NUMBER	RN/FT	MACH	QINF PSI	PINF PSIA	TINF DEG. R	PT PSIA	TAV DEG. R	PI2P1	ALPHA DEG.	BETA DEG.	RHO SLUGS/ FT ³ .3165-04
51	.1026-07	7.300	2.501	.6703-01	177.7	388.7	1974.	.1197-01	30.00	.0000	.0000

RUN NUMBER	VINF FT/SEC										
51	4770.										

TEST DATA

RUN NUMBER	X	Y	Z	TAP NO	P PSIA	CP	P/PINF	P/PT	P/PT2	
51	.00000	7.3000	179.00	1.634	.6265	24.37	.4203-02	.3511		
51	.25000	.90000	169.00	.0000	.0000	.0000	.0000	.0000		
51	.25000	1.50000	169.00	.788	.6881	26.67	.4600-02	.3842		
51	.25000	1.8750	170.00	1.772	.6819	26.44	.4560-02	.3809		
51	.25000	3.0000	171.00	1.740	.6692	25.96	.4478-02	.3741		
51	.25000	3.9000	172.00	1.754	.6747	26.17	.4513-02	.3770		
51	.25000	5.8500	173.00	1.701	.6533	25.37	.4376-02	.3655		
51	.25000	6.3000	177.00	1.622	.6217	24.19	.4172-02	.3485		
51	.25000	6.9000	178.00	1.686	.6475	25.15	.4338-02	.3624		

DATE 03 APR 79

AMES 0458 HEATING AND PRESSURE DATA

0458 ELEVON/ELEVON-PRESSURES

PAGE 168
(R2XE40)

FLAT PLATE

FLAT PLATE		FLAT PLATE		PARAMETRIC DATA	
		ALPHA = 30.00	BETA = 0000	MACH = 7.300	LENGTH = 7.800
		ELEVON = -10.00	RNL = 1.000		

TEST CONDITIONS

RUN NUMBER	RN/FT	MACH	QINF PSI	PINF PSI	TINF DEG. R	PTA DEG. R	PTAPT1	ALPHA DEG.	BETA DEG.	PHI DEG.	RHO SLUGS/FT ³
52	.9342*06	7.300	2.522	.6761-01	182.7	393.9	2024.	.1191-01	29.99	.0000	.0000

RUN NUMBER VINF F/SEC
52 4836.

TEST DATA

RUN NUMBER	Y	X	TAP NO	P PSIA	CP	P/PINF	P/PT	P/PT2
52	.00000	7.3000	179.00	1.668	.6347	24.88	.4235-02	.3555
52	.25000	.90000	168.00	.0000	.0000	.0000	.0000	.0000
52	.25000	1.50000	169.00	1.820	.6949	26.92	.4620-02	.3878
52	.25000	1.87500	170.00	1.804	.6887	26.69	.4581-02	.3845
52	.25000	3.00000	171.00	1.773	.6762	26.22	.4509-02	.3777
52	.25000	3.90000	172.00	1.789	.6826	26.16	.4542-02	.3812
52	.25000	5.85000	173.00	1.737	.6619	25.69	.4409-02	.3700
52	.25000	6.30000	177.00	1.664	.6329	24.61	.4223-02	.3545
52	.25000	6.90000	178.00	1.724	.6568	25.50	.4376-02	.3673

DATE 03 APR 79

AMES OH58 HEATING AND PRESSURE DATA

PAGE 189
(R2XEH1)

OH58 ELEVON/ELEVON-PRESURES

FLAT PLATE

FLAT PLATE		ALPHA = 40.00	BETA = 0000	MACH = 7.300	LENGTH = 6.000				
		RNL = .0000	RNL = .5000						
RUN NUMBER	RN/FT /FT	MACH	QINF PSI	TINF DEG. R	PTAVER DEG. R	PTAVER DEG.	BETA DEG.	PHI DEG.	RHO SLUGS/ FT ³
38	.5088+06	7.300	1.266	.3395-01 180.3	197.3 2000.	.1191-01	40.00	.0000	.0000
RUN NUMBER	VINF FT/SEC								
38	4805.								

TEST CONDITIONS

RUN NUMBER	RN/FT /FT	MACH	QINF PSI	TINF DEG. R	PTAVER DEG. R	PTAVER DEG.	BETA DEG.	PHI DEG.	RHO SLUGS/ FT ³
38	.5088+06	7.300	1.266	.3395-01 180.3	197.3 2000.	.1191-01	40.00	.0000	.0000
RUN NUMBER	VINF FT/SEC								
38	4805.								

TEST DATA

RUN NUMBER	Y	X	TAP NO	P PSIA	CP	P/PINF	P/PT	P/PT2
38	.00000	5.5000	179.00	1.492	1.152	43.95	.7563-02	.6333
38	.25000	.90000	168.00	1.602	1.238	47.18	.8117-02	.6797
38	.25000	1.5000	169.00	1.573	1.215	46.33	.7970-02	.6674
38	.25000	1.8750	170.00	1.611	1.246	47.46	.8165-02	.6837
38	.25000	3.0000	171.00	1.541	1.190	45.40	.7809-02	.6539
38	.25000	4.5000	177.00	1.519	1.173	44.75	.7698-02	.6447
38	.25000	5.1000	178.00	1.538	1.188	45.32	.7795-02	.6528

DATE 03 APR 79

AMES OH58 HEATING AND PRESSURE DATA

OH58 ELEVON/ELEVON-PRESURES

PAGE 190
1R2XE421

FLAT PLATE

FLAT PLATE

PARAMETRIC DATA

	ALPHA =	40.00	BETA	=	.0000	MACH =	7.300	LENGTH =	6.000
	ELEVON =	5.000	R/N/L	=	.5000				

TEST CONDITIONS

RUN NUMBER	RN/FT	MACH	QINF PSI	PINF PSIA	TINF DEG. R	PT INF DEG.	PT2 PT1 DEG.	ALPHA DEG.	BETA DEG.	PHI DEG.	RHO SLUGS/ FT3	1606-04
41	.5159+06	7.300	1.294	.3469-01	181.3	201.9	2010.	.1193-01	40.00	.0000	.0000	
RUN NUMBER	VINF FT/SEC											
41	4818.											

TEST DATA

RUN NUMBER	Y	X	TAP NO	P PSIA	CP	P/PINF	P/PT	P/PT2
41	.00000	5.5000	179.00	1.492	1.126	43.00	.7389-02	.6194
41	.25000	.90000	168.00	1.584	1.197	45.64	.7844-02	.6575
41	.25000	1.5000	169.00	1.572	1.188	45.30	.7785-02	.6525
41	.25000	1.8750	170.00	1.557	1.176	44.88	.7713-02	.6465
41	.25000	3.0000	171.00	1.549	1.170	44.65	.7673-02	.6431
41	.25000	4.5000	177.00	1.520	1.148	43.82	.7531-02	.6312
41	.25000	5.1000	178.00	1.535	1.159	44.24	.7603-02	.6373

DATE 03 APR 79

AMES 0458 HEATING AND PRESSURE DATA

PAGE 191
(R2X43)

FLAT PLATE

0458 ELEVON/ELEVON-PRESSURES

FLAT PLATE

PARAMETRIC DATA

ALPHA = 40.00 BETA = .0000 MACH = 7.300 LENGTH = 6.000
ELEVON = -10.00 RNL = .50000

TEST CONDITIONS

RUN NUMBER	RN/FT /FT	MACH	QINF PSI	PINF PSIA	TINF DEG. R	PT DEG. R	TTAV DEG. R	P12P1	ALPHA DEG.	BETA DEG.	PHI DEG.	RHO SLUGS/ FT3
43	.5094+06	7.300	1.253	.3358-01	178.8	194.9	1985.	.1196-01	40.01	.0000	.0000	.1576-04

RUN NUMBER VINF FT/SEC
43 4785.

TEST DATA

RUN NUMBER	X	Y	TAP NO	P PSIA	CP	P/PINF	P/PT	P/PT2
43	.00000	5.5000	179.00	1.446	1.127	43.05	.7417-02	.6203
43	.25000	.90000	168.00	1.546	1.208	46.05	.7933-02	.6634
43	.25000	1.5000	169.00	1.523	1.189	45.37	.7816-02	.6536
43	.25000	1.8750	170.00	1.498	1.169	44.61	.7686-02	.6427
43	.25000	3.0000	171.00	1.504	1.174	44.79	.7717-02	.6453
43	.25000	4.5000	177.00	1.475	1.151	43.93	.7568-02	.6329
43	.25000	5.1000	178.00	1.489	1.162	44.35	.7641-02	.6390

DATE 03 APR 79

AMES OH58 HEATING AND PRESSURE DATA

OH58 ELEVON/ELEVON-PRESSURES

FLAT PLATE

PAGE 192
(R2X44)

FLAT PLATE

	ALPHA = 40.00	BETA = .0000	MACH = 7.300	LENGTH = 6.000
	ELEVON = -10.00	RNL = .7500		

TEST CONDITIONS

RUN NUMBER	RN/FT /FT	MACH	QINF PSI	PINF PSIA	TINF DEG. R	PTA DEG. R	TTAV DEG.	PT2PT1 DEG.	ALPHA DEG.	BETA DEG.	PHI DEG.	RHO SLUGS/ FT ³
44	.7161+06	7.300	1.876	.5029-01	186.8	294.3	2065.	.1187-01	40.00	.0000	.0000	.2260-04

RUN NUMBER VINF FT/SEC
44 4890.

TEST DATA

RUN NUMBER	Y	X	TAP NO	P PSIA	CP	P/PINF	P/PT	P/PT2
44	.00000	5.5000	179.00	2.164	1.127	43.03	.7353-02	.6196
44	.25000	.90000	168.00	2.312	1.206	45.98	.7857-02	.6621
44	.25000	1.5000	169.00	2.297	1.198	45.68	.7807-02	.6578
44	.25000	1.8750	170.00	2.268	1.182	45.11	.7709-02	.6496
44	.25000	3.0000	171.00	2.239	1.167	44.53	.7610-02	.6413
44	.25000	4.5000	177.00	2.194	1.143	43.63	.7457-02	.6283
44	.25000	5.1000	178.00	2.214	1.153	44.02	.7523-02	.6340

DATE 03 APR 79

AMES OH58 HEATING AND PRESSURE DATA

PAGE 193
(R2X45)

FLAT PLATE

OH58 ELEVON/ELEVON-PRESSURES

FLAT PLATE

PARAMETRIC DATA

		ALPHA = 40.00	BETA		7.300	LENGTH = 6.000
		ELEVON = .0000	RNL	= 1.000		

TEST CONDITIONS

RUN NUMBER	RM/FT /FT	MACH	QINF PSIA	PINF PSIA	TINF DEG. R	PTAV DEG. R	PT2PT1	ALPHA DEG.	BETA DEG.	PHI DEG.	RHO SLUGS/ FT3
39	.1042+07	7.300	2.533	.6789-01	177.4	393.5	1970.	.1198-01	40.04	.0000	.0000

RUN NUMBER	VINF FT/SEC
39	4765.

TEST DATA

RUN NUMBER	Y	X	TAP NO	P PSIA	CP	P/PINF	P/PT	P/PT2
39	.00000	5.5000	179.00	3.006	1.160	44.27	.7638-02	.6378
39	.25000	.90000	168.00	3.143	1.214	46.29	.7987-02	.6670
39	.25000	1.5000	169.00	3.154	1.219	46.45	.8015-02	.6693
39	.25000	1.8750	170.00	3.218	1.244	47.40	.8177-02	.6828
39	.25000	3.0000	171.00	3.039	1.173	44.76	.7723-02	.6449
39	.25000	4.5000	177.00	2.999	1.157	44.17	.7620-02	.6363
39	.25000	5.1000	178.00	3.049	1.177	44.90	.7748-02	.6470

DATE 03 APR 79

AMES OH58 HEATING AND PRESSURE DATA

PAGE 194
(R2XE46)

OH58 ELEVON/ELEVON-PRESSURES

FLAT PLATE

		ALPHA = 40.00	BETA	0000	MACH	7.300	LENGTH = 6.000
		ELEVON = 5.000	RNL	1.000			

TEST CONDITIONS

RUN	RN/FT	MACH	QINF	PINF	TINF	PT	TTAV	ALPHA	BETA	PHI	RHO
NUMBER	/FT		PSI	PSIA	DEG. R	PSIA	DEG. R	DEG.	DEG.	DEG.	SLUGS/
42	.9925+06	7.300	2.498	.6597-01	181.7	389.8	2014.	.1193-01	.40.02	.0000	.3093-04

RUN YINF
NUMBER FT/SEC
42 4823.

TEST DATA

RUN	Y	X	TAP NO	P	CP	P/PINF	P/PT	P/PT2
NUMBER				PSIA				
42	.00000	5.5000	179.00	2.820	1.102	42.11	.7233-02	.6065
42	.25000	.90000	168.00	2.975	1.164	44.43	.7632-02	.6399
42	.25000	1.50000	169.00	2.975	1.164	44.42	.7631-02	.6399
42	.25000	1.8750	170.00	2.939	1.150	43.89	.7510-02	.6322
42	.25000	3.00000	171.00	2.895	1.132	43.23	.7425-02	.6226
42	.25000	4.50000	177.00	2.834	1.107	42.31	.7269-02	.6095
42	.25000	5.10000	178.00	2.866	1.121	42.80	.7353-02	.6165

DATE 03 APR 79

AMES OH58 HEATING AND PRESSURE DATA

OH58 ELEVON/ELEVON-PRESSURES

FLAT PLATE

ALPHA = 40.00
ELEVON = -10.00
RNL = 1.000
MACH = 1.000
LENGTH = 6.000

TEST CONDITIONS

RUN NUMBER	RN/FT /FT	MACH	QINF PSI	PINF PSIA	TINF DEG. R	PTAVER DEG. R	P1APT1 DEG.	ALPHA DEG.	BETA DEG.	PHI DEG.	RHO SLUGS/ FT ³
45	.1019+07	7.300	2.507	.6722-01	178.9	390.2	1986.	.1196-01	40.00	.0000	.0000

RUN NUMBER
VINF
FT/SEC

45 4785.

TEST DATA

RUN NUMBER	X	Y	TAP NO	P PSIA	CP	P/PINF	P/PT	P/PT2
45	.00000	5.5000	179.00	2.823	1.098	42.00	.7236-02	.6051
45	.25000	.90000	168.00	2.983	1.163	44.38	.7655-02	.6393
45	.25000	1.5000	169.00	2.992	1.166	44.51	.7667-02	.6412
45	.25000	1.8750	170.00	2.973	1.159	44.23	.7619-02	.6372
45	.25000	3.0000	171.00	2.892	1.126	43.02	.7411-02	.6198
45	.25000	4.5000	177.00	2.840	1.106	42.25	.7227-02	.6086
45	.25000	5.1000	178.00	2.876	1.120	42.79	.7371-02	.6164

PAGE 195
(R2XE47)

DATE 03 APR 79

AMES 0H58 HEATING AND PRESSURE DATA

PAGE 196
(R22XE48)

FLAT PLATE		0H58 ELEVON/ELEVON-PRESURES		FLAT PLATE		PARAMETRIC DATA					
		ALPHA = 40.00	BETA = 0000	MACH = 7.300		LENGTH = 6.000					
		ELEVON = .0000	RN/L = 3.000								
RUN NUMBER	RN/FT /FT	MACH	QINF PSIA	PINF PSIA	TINF DEG. R	PTAV DEG. R	PTAPT1	ALPHA DEG.	BETA DEG.	PHI DEG.	RHO SLUGS/ FT3
40	.2889-07	7.300	7.412	.9887	184.1	1160.	2039.	.1190-01	40.05	.0000	.9057-04
RUN NUMBER	VINF FT/SEC										
40	4855.										

TEST CONDITIONS

RUN NUMBER	Y	X	TAP NO	P PSIA	CP	P/PINF	P/PT	P/PT2
40	.00000	5.5000	179.00	.0000	.0000	.0000	.0000	.0000
40	.25000	9.0000	168.00	.0000	.0000	.0000	.0000	.0000
40	.25000	1.5000	169.00	.0000	.0000	.0000	.0000	.0000
40	.25000	1.8750	170.00	.0000	.0000	.0000	.0000	.0000
40	.25000	3.0000	171.00	.0000	.0000	.0000	.0000	.0000
40	.25000	4.5000	177.00	.0000	.0000	.0000	.0000	.0000
40	.25000	5.1000	178.00	.0000	.0000	.0000	.0000	.0000

TEST DATA

RUN NUMBER	Y	X	TAP NO	P PSIA	CP	P/PINF	P/PT	P/PT2
40	.00000	5.5000	179.00	.0000	.0000	.0000	.0000	.0000
40	.25000	9.0000	168.00	.0000	.0000	.0000	.0000	.0000
40	.25000	1.5000	169.00	.0000	.0000	.0000	.0000	.0000
40	.25000	1.8750	170.00	.0000	.0000	.0000	.0000	.0000
40	.25000	3.0000	171.00	.0000	.0000	.0000	.0000	.0000
40	.25000	4.5000	177.00	.0000	.0000	.0000	.0000	.0000
40	.25000	5.1000	178.00	.0000	.0000	.0000	.0000	.0000

DATE 03 APR 79

ANES 0H58 HEATING AND PRESSURE DATA

OH58 FUSELAGE/ELEVON-PRESURES

FLAT PLATE

PAGE 197
(R2XE49)

FLAT PLATE

		ALPHA = 30.00	BETA = .0000	MACH = .5000	LENGTH = 14.40
		ELEVON = .0000	RNL = .5000		

TEST CONDITIONS

RUN NUMBER	RN/FT	MACH	QINF PSI	PINF PSIA	TINF DEG. R	PT	TTAV DEG. R	PT2PT1	ALPHA DEG.	BETA DEG.	PHI DEG.	RHO SLUGS/ FT3
73	.5153+06	7.300	1.258	.3372-01	178.0	195.6	1976.	.1197-01	30.00	.0000	.0000	.1530-04

RUN NUMBER
VINF
FT/SEC
73 4773.

TEST DATA

RUN NUMBER	Y	X	TAP NO	P PSIA	CP	P/PINF	P/P	P/PT2
73	.00000	13.900	179.00	.9208	.7052	27.31	.4709-02	.3934
73	.25000	.90000	168.00	.9457	.7250	28.05	.4836-02	.4040
73	.25000	.15000	169.00	.9606	.7368	28.49	.4912-02	.4044
73	.25000	.87500	170.00	.00000	.00000	.0000	.00000	.00000
73	.25000	.30000	171.00	.9132	.6992	27.08	.4670-02	.3902
73	.25000	.3.6000	174.00	.9598	.7362	28.46	.4908-02	.4101
73	.25000	.7.2000	175.00	.9083	.6953	26.94	.4645-02	.3881
73	.25000	.10.8000	176.00	.9209	.7053	27.31	.4709-02	.3934
73	.25000	.12.900	177.00	.8954	.6850	26.55	.4679-02	.3825
73	.25000	.13.500	178.00	.9127	.6988	27.07	.4667-02	.3889

DATE 03 APR 79

AMES OH58 HEATING AND PRESSURE DATA

OH58 FUSELAGE/ELEVON-PRESSES

PAGE 198
(R2XE50)

FLAT PLATE

ALPHA = 30.00 MACH = .0000 LENGTH = 14.40
ELEVON = 10.00 RVAL = .5000

TEST CONDITIONS

RUN NUMBER	RN/FT /FT	MACH	QINF PSI	PINF PSI	TINF DEG. R	PT PSI	TTAV DEG.	PT2PT1	ALPHA DEG.	BETA DEG.	PHI DEG.	RHO SLUGS/ FT3
64	.5344+06	7.300	1.271	.3408-01	174.8	197.1	1945.	.1200-01	30.00	.0000	.0000	.1636-04

RUN NUMBER VINF FT/SEC
64 4731.

TEST DATA

RUN NUMBER	Y	X	TAP NO	P PSIA	CP	P/PINP	P/PT	P/PT2
64	.0000	13.900	179.00	.9414	.7136	27.62	.4777-02	.3980
64	.2500	.90000	168.00	.9110	.6897	26.73	.4623-02	.3851
64	.2500	1.5000	169.00	.9226	.6988	27.07	.4682-02	.3900
64	.2500	1.9750	170.00	.0000	.0000	.0000	.0000	.0000
64	.2500	3.0000	171.00	.8757	.6619	25.69	.4444-02	.3702
64	.2500	3.6000	174.00	.9248	.7005	27.13	.4593-02	.3910
64	.2500	7.2000	175.00	.8770	.6629	25.73	.4450-02	.3707
64	.2500	10.800	176.00	.8860	.6700	25.99	.4496-02	.3745
64	.2500	12.900	177.00	.8607	.6501	25.25	.4368-02	.3638
64	.2500	13.500	178.00	.8941	.6764	26.23	.4537-02	.3780

DATE 03 APR 79

AMES OH58 HEATING AND PRESSURE DATA

OH58 FUSELAGE/ELEVON-PRESURES

FLAT PLATE

ALPHA =	30.00	BETA	.0000	MACH =	7.300	LENGTH =	14.40
ELEVON =	-10.00	RN/L	.5000				

TEST CONDITIONS

RUN NUMBER	RN/FT /FT	MACH	QINF PSI	PINF PSIA	TINF DEG. R	PT PSIA	TTAV DEG. R	PT2PT1	ALPHA DEG.	BETA DEG.	PHI DEG.	RHO SLUGS/ FT3	1568-04
69	.5036+06	7.300	1.263	.3387-01	181.3	197.1	2010.	.1193-01	30.00	.0000	.0000		

RUN
NUMBER

VINF
FT/SEC

69 4818.

TEST DATA

RUN NUMBER	X	Y	TAP NO	P PSIA	CP	P/PINF	P/PT	P/PT2
69	13.900		179.00	.6820	.6714	26.04	.4476-02	.3751
69	.90000	168.00	.9089	.6926	26.84	.4612-02	.3866	
69	1.5000	169.00	.9230	.7038	27.25	.4684-02	.3926	
69	.25000	1.8750	170.00	.0000	.0000	.0000	.0000	
69	.25000	3.0000	171.00	.8705	.6622	25.70	.4417-02	.3702
69	.25000	3.6000	174.00	.9144	.6970	27.00	.4640-02	.3889
69	.25000	7.2000	175.00	.8735	.6646	25.79	.4433-02	.3715
69	.25000	10.800	176.00	.8840	.6729	26.10	.4486-02	.3760
69	.25000	12.900	177.00	.8585	.6528	25.35	.4357-02	.3652
69	.25000	13.500	178.00	.8760	.6666	25.87	.4445-02	.3726

DATE 03 APR 79

AMES OH58 HEATING AND PRESSURE DATA

OH58 FUSELAGE/ELEVON-PRESSES FLAT PLATE

PAGE 200
(R2XE52)

FLAT PLATE

		PARAMETRIC DATA				
		ALPHA DEG.	BETA DEG.	MACH	7.300	LENGTH = 14.40
		RN/L	.7500			

TEST CONDITIONS

RUN NUMBER	RN/FT /FT	MACH	QINF PSI	PINF PSIA	TINF DEG. R	PT PSIA	TTAV DEG. R	P12P1 P12P1	ALPHA DEG.	BETA DEG.	PHI DEG.	RHO SLUGS/ FT ³
72	.7629+06	7.300	1.890	.5067-01	179.8	294.4	1995.	.1195-01	30.00	.0000	.0000	.2365-04

RUN NUMBER	VINF FT/SEC
72	4797.

TEST DATA

RN NUMBER	X	Y	TAP NO	P PSIA	CP	P/PINF	P/PT	P/PT2
72	.00000	13.900	179.00	1.342	.6830	.48	.4558-02	.3815
72	.25000	1.9000	168.00	1.386	.7064	.35	.4708-02	.3940
72	.25000	1.5000	169.00	1.412	.7202	.87	.4796-02	.4014
72	.25000	1.8750	170.00	0.000	.0000	0.00	.0000	.0000
72	.25000	3.0000	171.00	1.350	.6874	.64	.4586-02	.3838
72	.25000	3.6000	174.00	1.415	.7220	.93	.4808-02	.4024
72	.25000	7.2000	175.00	1.340	.6821	.44	.4552-02	.3810
72	.25000	10.800	176.00	1.379	.7025	.21	.4683-02	.3919
72	.25000	12.900	177.00	1.325	.6741	.15	.4501-02	.3767
72	.25000	13.500	178.00	1.344	.6841	.52	.4565-02	.3820

DATE 03 APR 79

AMES OH58 HEATING AND PRESSURE DATA

OH58 FUSELAGE/ELEVON-PRESSURES FLAT PLATE

FLAT PLATE

PARAMETRIC DATA

ALPHA = 30.00 BETA = .0000 MACH = 7.300 LENGTH = 14.40
ELEVON = 10.00 RN/L = .7500

TEST CONDITIONS

RUN NUMBER	RN/FT	MACH	QINF PSIA	PINF PSIA	TINF DEG. R	PI PSIA	TTAV DEG. R	PT2PTI	ALPHA DEG.	BETA DEG.	PHI DEG.	RHO SLUGS/ FT3
62	.7671+06	7.300	1.911	.5123-01	180.4	297.9	2001.	.1194-01	30.00	.0000	.0000	.2383-04

RUN NUMBER VINF FT/SEC
62 4806.

TEST DATA

RUN NUMBER	Y	X	TAP NO	P PSIA	CP	P/PINF	P/PIT	P/P12
62	0.0000	13.900	179.00	1.339	.6739	26.14	.4496-02	.3765
62	.25000	.90000	168.00	1.385	.6977	27.03	.4649-02	.3893
62	.25000	1.5000	169.00	1.408	.7099	27.48	.4727-02	.3959
62	.25000	1.8750	170.00	.0000	.0000	.0000	.0000	.0000
62	.25000	3.0000	171.00	1.342	.5751	26.18	.4504-02	.3772
62	.25000	3.6000	174.00	1.402	.7068	27.37	.4707-02	.3942
62	.25000	7.2000	175.00	1.340	.6744	26.16	.4499-02	.3768
62	.25000	10.800	176.00	1.345	.6771	26.26	.4517-02	.3783
62	.25000	12.900	177.00	1.311	.6592	25.59	.4402-02	.3686
62	.25000	13.500	178.00	1.338	.6734	26.12	.4493-02	.3763

DATE 03 APR 79

AMES OH58 HEATING AND PRESSURE DATA

PAGE 202
(R2XE54)

OH58 FUSELAGE/ELEVON-PRESURES

FLAT PLATE

FLAT PLATE		PARAMETRIC DATA			
		ALPHA = 30.00	BETA = 0000	MACH = 7.300	LENGTH = 14.40
RUN NUMBER	RN/FT	MACH	QINF PSIA	TINF DEG. R	TTAV DEG. R
68	.7541+06	7.300	1.898	.5087-01	181.7 2014.
RUN NUMBER	VINF FT/SEC				
68	4823.				

TEST CONDITIONS

RUN NUMBER	RN/FT	MACH	QINF PSIA	PINF PSIA	TINF DEG. R	PTPPI	ALPHA DEG.	BETA DEG.	PHI DEG.	RHO SLUGS/FT ³
68	.7541+06	7.300	1.898	.5087-01	181.7	296.1	.1193-01	30.08	.0000	.2350-04

TEST DATA

RUN NUMBER	Y	X	TAP NO	P PSIA	C _P	P/PINF	P/PT	P/PT2
68	.00000	13.900	179.00	1.320	.6687	25.34	.4457-02	.3737
68	.25000	190000	168.00	1.367	.6934	26.86	.4615-02	.3870
68	.25000	1.5000	169.00	1.395	.7081	27.42	.4710-02	.3949
68	.25000	1.8750	170.00	.0000	.0000	.0000	.0000	.0000
68	.25000	3.0000	171.00	1.326	.6720	26.07	.4478-02	.3755
68	.25000	3.6000	174.00	1.389	.7053	27.31	.4692-02	.3934
68	.25000	7.2000	175.00	1.325	.6714	26.04	.4474-02	.3751
68	.25000	10.8000	176.00	1.352	.6856	26.57	.4565-02	.3828
68	.25000	12.900	177.00	1.301	.6585	25.57	.4392-02	.3683
68	.25000	13.500	178.00	1.317	.6672	25.89	.4447-02	.3729

DATE 03 APR 79

AMES OH58 HEATING AND PRESSURE DATA

OH58 FUSELAGE/ELEVON-PRESURES FLAT PLATE

FLAT PLATE

ALPHA = 30.00
ELEVON = .0000
R/L = 1.000

PARAMETRIC DATA

RUN NUMBER	RN/FT /FT	MACH	QINF PSI	PINF PSIA	TINF DEG. R	PT	TAV DEG. R	PTEPPI	ALPHA DEG.	BETA DEG.	PHI DEG.	RHO SLUGS/ FT ³
71	.1023+07	7.300	2.503	.6709-01	178.2	389.2	1979.	.1197-01	30.00	.0000	.0000	.3159-04

TEST CONDITIONS

71 4777.

TEST DATA

RUN NUMBER	X	Y	TAP NO	P PSIA	CP	P/PINF	P/PT	P/PT2
71	13.900	179.00	1.773	.6816	26.42	.4555-.02	.3807	
71	.90000	168.00	.829	.7040	27.26	.4699-.02	.3928	
71	1.50000	169.00	.865	.7186	27.81	.4793-.02	.4006	
71	.25000	170.00	.0000	.0000	.0000	.0000	.0000	
71	.25000	171.00	1.775	.6824	26.46	.4561-.02	.3811	
71	.25000	174.00	.851	.7126	27.58	.4755-.02	.3974	
71	.25000	175.00	.763	.6777	26.28	.4531-.02	.3786	
71	.25000	176.00	.831	.7048	27.29	.4705-.02	.3932	
71	.25000	177.00	1.755	.6744	26.16	.4509-.02	.3769	
71	.25000	178.00	.785	.6864	26.60	.4586-.02	.3833	

DATE 03 APR 79

AMES OH58 HEATING AND PRESSURE DATA

OH58 FUSELAGE/ELEVON-PRESURES

FLAT PLATE

FLAT PLATE		ALPHA = 30.00	BETA = 0000	MACH = 7.300	LENGTH = 14.40
RUN NUMBER	RN/FT /FT	MACH	ELEVON = 10.00	RN/L = 1.000	
61	.1031+07	7.300	2.479	.6647-01	
RUN NUMBER	VINF FT/SEC				
61	4744.				

TEST CONDITIONS

RUN NUMBER	QINF PSI	PINF PSIA	TINF DEG: R	PT PSIA	TTAV DEG. R	PT2PT1	ALPHA DEG.	BETA DEG.	PHI DEG.	RHO SLUGS/ FT ³	.3173-04
61											

61 4744.

TEST DATA

RUN NUMBER	Y	X	TAP NO	P PSIA	CP	P/PINF	P/PT	P/PT2
61	.00000	13.900	179.00	1.727	.6697	25.98	.4490-02	.3744
61	.25000	.90000	168.00	1.802	.6999	27.11	.4684-02	.3906
61	.25000	.50000	169.00	1.840	.7154	27.69	.4785-02	.3989
61	.25000	.1.8750	170.00	.0000	.0000	.0000	.0000	.0000
61	.25000	.3.0000	171.00	1.750	.6790	26.33	.4550-02	.3794
61	.25000	.3.6000	174.00	1.820	.7071	27.38	.4731-02	.3945
61	.25000	7.2000	175.00	1.744	.6768	26.25	.4535-02	.3782
61	.25000	10.800	176.00	1.765	.6851	26.56	.4589-02	.3826
61	.25000	12.900	177.00	1.705	.6610	25.66	.4434-02	.3697
61	.25000	13.500	178.00	1.734	.6724	26.08	.4507-02	.3758

DATE 03 APR 79

AMES OH58 HEATING AND PRESSURE DATA

OH58 FUSELAGE/ELEVON-PRESSURES FLAT PLATE

PAGE 205
IR2XE571

FLAT PLATE

PARAMETRIC DATA

ALPHA = 30.00 BETA = 0.0000 MACH = 7.300 LENGTH = 14.40
ELEVON = -10.00 R/L = 1.000

TEST CONDITIONS

RUN NUMBER	RN/FT /FT	MACH	QINF PSI	PINF PSI	TINF DEG. R	PT PSIA	TAvg DEG. R	P12PT1	ALPHA DEG.	BETA DEG.	PHI DEG.	RHO SLUGS/ FT ³	3150-04
67	.1018+07	7.300	2.505	.6714-01	178.8	389.7	1985.	.1196-01	30.00	.0000	.0000		

RUN NUMBER VINF FT/SEC
67 4785.

TEST DATA

RUN NUMBER	Y	X	TAP NO	P PSIA	CP	P/PINF	P/PT	P/PT2
67	.00000	13.900	179.00	1.714	.6577	25.53	.4399-02	.3678
67	.25000	.90000	169.00	1.777	.6828	26.47	.4560-02	.3813
67	.25000	1.5000	169.00	1.812	.6965	26.98	.4649-02	.3887
67	.25000	.8750	170.00	.0000	.0000	.0000	.0000	
67	.25000	1.5000	171.00	1.722	.6608	25.65	.4419-02	.3695
67	.25000	3.6000	174.00	1.802	.6929	26.65	.4625-02	.3867
67	.25000	7.2000	175.00	1.722	.6608	25.65	.4419-02	.3695
67	.25000	10.800	176.00	1.771	.6803	26.38	.4544-02	.3800
67	.25000	12.900	177.00	1.690	.6478	25.16	.4335-02	.3625
67	.25000	13.500	178.00	1.721	.6604	25.63	.4416-02	.3693

DATE 03 APR 79

AMES OH58 HEATING AND PRESSURE DATA

OH58 FUSELAGE/ELEVON-PRESSURES

PAGE 206
(R2XE58)

FLAT PLATE

FLAT PLATE

	ALPHA ELEVON =	30.00	BETA RN/L =	.0000	MACH =	7.300	LENGTH =	14.40
	ELEVON =	.0000	RN/L	1.500				

RUN NUMBER	RN/FT /FT	MACH	Q _{INF} PSI	P _{INF} PSIA	T _{INF} DEG. R	P _T PSIA	T _{TAV} DEG. R	P _{T2PT1}	ALPHA DEG.	BETA DEG.	PHI DEG.	RHO SLUGS/ FT ³
70	.1482+07	7.300	3.766	.1010	182.9	588.4	2026.	.1191-01	30.00	.0000	.0000	.4632-04

RUN
NUMBERV_{INF}
FT/SEC

70 4839.

TEST CONDITIONS

RUN NUMBER	X	Y	Z	TAP NO	P PSIA	C _P	P/P _{INF}	P/P _T	P/P _{T2}
70	.00000	13.900	179.00	2.606	.6651	25.81	.4429-02	.3718	
70	.25000	.90000	168.00	2.749	.7032	27.23	.4673-02	.3923	
70	.25000	1.5000	169.00	2.803	.7176	27.77	.4764-02	.4000	
70	.25000	1.8750	170.00	.0000	.0000	.0000	.0000	.0000	
70	.25000	3.0000	171.00	2.660	.6797	26.35	.4522-02	.3796	
70	.25000	3.6000	174.00	2.757	.7053	27.31	.4686-02	.3934	
70	.25000	7.2000	175.00	2.658	.6791	26.33	.4518-02	.3793	
70	.25000	10.800	176.00	2.761	.7064	27.35	.4693-02	.3940	
70	.25000	12.900	177.00	2.618	.6683	25.93	.4449-02	.3735	
70	.25000	13.500	178.00	2.637	.6733	26.12	.4481-02	.3762	

TEST DATA

RUN NUMBER	X	Y	Z	TAP NO	P PSIA	C _P	P/P _{INF}	P/P _T	P/P _{T2}
70	.00000	13.900	179.00	2.606	.6651	25.81	.4429-02	.3718	
70	.25000	.90000	168.00	2.749	.7032	27.23	.4673-02	.3923	
70	.25000	1.5000	169.00	2.803	.7176	27.77	.4764-02	.4000	
70	.25000	1.8750	170.00	.0000	.0000	.0000	.0000	.0000	
70	.25000	3.0000	171.00	2.660	.6797	26.35	.4522-02	.3796	
70	.25000	3.6000	174.00	2.757	.7053	27.31	.4686-02	.3934	
70	.25000	7.2000	175.00	2.658	.6791	26.33	.4518-02	.3793	
70	.25000	10.800	176.00	2.761	.7064	27.35	.4693-02	.3940	
70	.25000	12.900	177.00	2.618	.6683	25.93	.4449-02	.3735	
70	.25000	13.500	178.00	2.637	.6733	26.12	.4481-02	.3762	

DATE 03 APR 79

AMES OH58 HEATING AND PRESSURE DATA

OH58 FUSELAGE/ELEVON-PRESSES FLAT PLATE

FLAT PLATE

ALPHA = 30.00
ELEVON = 10.00
RN/L = .500
PARAMETRIC DATA
LENGTH = 14.40

RUN NUMBER	RN/FT	MACH	QINF PSI	PINF PSIA	TINF DEG. R	PT INF DEG.	TTAV DEG. R	PT2PT1	ALPHA DEG.	BETA DEG.	PHI DEG.	RHO SLUGS/ FT3	4629-04
63	.1482+07	7.300	3.756	.1007	182.6	586.7	2023.	.1192-01	30.00	.0000	.0000		

RUN NUMBER VINF FT/SEC
63 4834.

TEST CONDITIONS

RUN NUMBER	X	Y	Z	TAP NO	P PSIA	CP	P/PINF	P/PT	P/PT2
63	.00000	13.900	179.00	2.613	.6687	25.95	.4453-02	.3737	
63	.25000	.90000	168.00	2.737	.7019	27.18	.4666-02	.3916	
63	.25000	1.5000	169.00	2.789	.7156	27.70	.4754-02	.3989	
63	.25000	1.8750	170.00	.0000	.0000	.0000	.0000	.0000	
63	.25000	2.0000	171.00	2.648	.6781	26.29	.4513-02	.3787	
63	.25000	3.6000	174.00	2.744	.7037	27.25	.4677-02	.3925	
63	.25000	7.2000	175.00	2.644	.6771	26.26	.4507-02	.3782	
63	.25000	10.800	176.00	2.697	.6911	26.78	.4596-02	.3857	
63	.25000	12.900	177.00	2.620	.6706	26.02	.4465-02	.3747	
63	.25000	13.500	178.00	2.647	.6778	26.28	.4511-02	.3786	

TEST DATA

RUN NUMBER	X	Y	Z	TAP NO	P PSIA	CP	P/PINF	P/PT	P/PT2
63	.00000	13.900	179.00	2.613	.6687	25.95	.4453-02	.3737	
63	.25000	.90000	168.00	2.737	.7019	27.18	.4666-02	.3916	
63	.25000	1.5000	169.00	2.789	.7156	27.70	.4754-02	.3989	
63	.25000	1.8750	170.00	.0000	.0000	.0000	.0000	.0000	
63	.25000	2.0000	171.00	2.648	.6781	26.29	.4513-02	.3787	
63	.25000	3.6000	174.00	2.744	.7037	27.25	.4677-02	.3925	
63	.25000	7.2000	175.00	2.644	.6771	26.26	.4507-02	.3782	
63	.25000	10.800	176.00	2.697	.6911	26.78	.4596-02	.3857	
63	.25000	12.900	177.00	2.620	.6706	26.02	.4465-02	.3747	
63	.25000	13.500	178.00	2.647	.6778	26.28	.4511-02	.3786	

DATE 03 APR 79

AMES OH58 HEATING AND PRESSURE DATA

OH58 FUSELAGE/ELEVON-PRESSURES

FLAT PLATE

FLAT PLATE		ALPHA = 30.00		BETA = 0000		MACH = 7.300		LENGTH = 14.40	
		ELEVON = -10.00		RN/L		1.500			

RUN NUMBER	RN/FT /FT	MACH	QINF PSI	PINF PSIA	TINF DEG. R	PT PSIA	TTAV DEG. R	PT2PT1	ALPHA DEG.	BETA DEG.	PHI DEG.	RHO SLUGS/ FT3
66	.1440+07	7.300	3.708	.9941-01	184.5	580.4	2043.	.1189-01	30.00	.0000	.0000	.4520-04

RUN NUMBER	VINF FT/SEC
66	4861.

TEST CONDITIONS

RUN NUMBER	RN/FT /FT	MACH	QINF PSI	PINF PSIA	TINF DEG. R	PT PSIA	TTAV DEG. R	PT2PT1	ALPHA DEG.	BETA DEG.	PHI DEG.	RHO SLUGS/ FT3
66	.1440+07	7.300	3.708	.9941-01	184.5	580.4	2043.	.1189-01	30.00	.0000	.0000	.4520-04

TEST DATA

RUN NUMBER	X	Y	X	TAP NO	P PSIA	CP	P/PINF	P/PT	P/PT2
66	.00000	13.900	179.00	2.579	.6686	25.94	.4443-02	.3736	
66	.25000	90000	168.00	2.715	.7054	27.31	.4678-02	.3934	
66	.25000	1.5000	169.00	2.770	.7201	27.86	.4772-02	.4013	
66	.25000	1.8750	170.00	.00000	.0000	.0000	.0000	.0000	
66	.25000	3.0000	171.00	2.628	.6817	26.43	.4527-02	.3807	
66	.25000	3.6000	174.00	2.704	.7023	27.20	.4659-02	.3917	
66	.25000	7.2000	175.00	2.619	.6794	26.37	.4513-02	.3794	
66	.25000	10.800	176.00	2.743	.7128	27.59	.4726-02	.3974	
66	.25000	12.900	177.00	2.609	.6766	26.24	.4495-02	.3779	
66	.25000	13.500	178.00	2.594	.6726	26.09	.4669-02	.3757	

DATE 03 APR 79

AMES 0458 HEATING AND PRESSURE DATA

PAGE 209
(R2XF49)

FUSELAGE

0458 FUSelage/ELEVon-PRESSES FUSELAGE

ALPHA = 30.00
ELEVON = .0000
RH/L = .5000
MACH = 7.300
LENGTH = 14.40

TEST CONDITIONS

RUN NUMBER	RN/FT /FT	MACH	QINF PSI	PINF PSIA	TINF DEG. R	PT INF DEG. R	TTAV DEG. R	PI2PT1	ALPHA DEG.	BETA DEG.	PHI DEG.	RHO SLUGS/ FT3
73	.5153+06	7.300	1.258	.3372-01	178.0	195.6	1976.	.1197-01	30.00	.0000	.0000	.1590-04

RUN NUMBER	VINF FT/SEC
73	4773.

TEST DATA

RUN NUMBER	Z	X	TAP NO	P PSIA	CP	P/PINF	P/PT	P/PT2
73	12500		136.00	.2283	.1547	6.770	.1167-02	.9754-01
73	12500		135.00	.2556	.1764	7.579	.1307-02	.1092-
73	12500		134.00	.2343	.1594	6.947	.1198-02	.1001-
73	12500		133.00	.2325	.1580	6.895	.1189-02	.9934-01
73	12500		132.00	.2379	.1623	7.055	.1216-02	.1016
73	12500		142.00	.5996-01	.2086-01	1.778	.3066-03	.2562-01
73	12500		141.00	.7367-01	.3176-01	2.185	.3767-03	.3148-01
73	12500		140.00	.8707-01	.424-01	2.582	.4453-03	.3720-01
73	12500		139.00	.1073	.5846-01	3.181	.5485-03	.4583-01
73	12500		138.00	.9556-01	.4916-01	2.834	.4886-03	.4083-01
73	12500		148.00	.3713-01	.2707-02	1.101	.1586-01	.1586-01
73	62500		147.00	.5381-01	.1597-01	1.596	.2752-03	.2299-01
73	62500		146.00	.6147-01	.2205-01	1.823	.3143-03	.2626-01
73	62500		145.00	.8329-01	.3941-01	2.470	.4259-03	.3559-01
73	62500		144.00	.7199-01	.3042-01	2.135	.3681-03	.3076-01
73	62500		155.00	.0000	.0000	.0000	.0000	.0000
73	69000		154.00	.4796-01	.1132-01	1.422	.2152-03	.2049-01
73	69000		153.00	.4433-01	.6433-02	1.315	.2267-03	.1894-01
73	69000		152.00	.5135-01	.1402-01	1.523	.2626-03	.2194-01
73	69000		151.00	.6049-01	.2129-01	.794	.3093-03	.2584-01
73	69000		150.00	.4718-01	.1070-01	1.399	.2113-03	.2016-01

OH-58 FUSELAGE/ELEVON-PRESSURES FUSELAGE

RUN NUMBER	Z	X	TAP NO	P	CP	P/PINF	P/P1	P/P12
			PS1A					
73	1.1250	.00000	161.00	.2253-01	-.8895-02	.6682	.1152-03	.9627-02
73	1.1250	.69000	160.00	.0000	.0000	.0000	.0000	.0000
73	1.1250	1.0640	159.00	.0000	.0000	.0000	.0000	.0000
73	1.1250	1.4370	158.00	.3394-01	-.1709-03	1.006	.1735-03	.1450-01
73	1.1250	2.2930	157.00	.5953-01	.2052-01	1.766	.3044-03	.2544-01
73	1.1250	2.6990	156.00	.4881-01	.1199-01	1.447	.2496-03	.2085-01
0	1.3750	.00000	167.00	.0000	.0000	.0000	.0000	.0000
0	1.3750	.69000	166.00	.0000	.0000	.0000	.0000	.0000
73	1.3750	1.0640	165.00	.3013-01	-.2856-02	.8935	.1541-03	.1287-01
73	1.3750	1.4370	164.00	-.6500	-.5436	-19.28	-.3324-02	-.2777
0	1.3750	2.2930	163.00	.0000	.0000	.0000	.0000	.0000
73	1.3750	2.6990	162.00	.7472-01	.3259-01	2.216	.3821-03	.3192-01

DATE 03 APR 79

AMES OH5B HEATING AND PRESSURE DATA

OH5B FUSELAGE/ELEVON-PRESSURES FUSELAGE

PAGE 211
(R2XF50)

FUSELAGE

AMES OH5B HEATING AND PRESSURE DATA

OH5B FUSELAGE/ELEVON-PRESSURES FUSELAGE

PARAMETRIC DATA

RUN NUMBER	RN/FT	MACH	QINF PSI	PINF PSIA	TINF DEG. R	PT PSIA	TTAV DEG. R	PI2PT1	ALPHA DEG.	BETA DEG.	PHI DEG.	RHO SLUGS/ FT3
64	.5344+06	7.300	1.271	.3408-01	174.8	197.1	1945.	.1200-01	30.00	.0000	.0000	.1636-04
RUN NUMBER	VINF FT/SEC											

64 4731.

TEST CONDITIONS

TEST DATA

RUN NUMBER	Z	X	TAP NO	P PSIA	CP	P/PINF	P/P	P/PT2
64	12500	.69000	136.00	.1211	.6843-01	3.553	6.145-03	5.119-01
64	12500	1.0640	135.00	.7594-01	.3292-01	2.229	.3854-03	.3210-01
64	12500	1.4370	134.00	.4710-01	.1024-01	1.382	.2390-03	.1991-01
64	12500	2.2930	133.00	.3464-01	.4392-03	1.016	.1758-03	.1465-01
64	12500	2.6990	132.00	.5457-01	.1611-01	1.601	.2769-03	.2307-01
64	12500	6.9000	142.00	.2009-01	.1101	.5895	.1020-03	.8494-02
64	37500	1.0640	141.00	.2569-01	.6606-02	.7536	.1303-03	.1086-01
64	37500	1.4370	140.00	.4164-01	.5945-02	1.222	.2113-03	.1760-01
64	37500	2.2930	139.00	.7848-01	.3492-01	2.303	.3983-03	.3318-01
64	37500	2.6990	138.00	.6211-01	.2204-01	1.822	.3152-03	.2626-01
64	62500	6.9000	148.00	.1336-01	.1630-01	.3919	.6779-04	.5648-02
64	62500	1.0640	147.00	.2220-01	.9347-02	.6513	.1127-03	.9385-02
64	62500	1.4370	146.00	.3904-01	.3900-02	1.145	.1981-03	.1651-01
64	62500	2.2930	145.00	.4900-01	.1173-01	1.437	.2486-03	.2071-01
64	62500	2.6990	144.00	.4025-01	.4851-02	1.181	.2043-03	.1702-01
0	87500	.00000	155.00	.0000	.0000	.0000	.0000	.0000
64	87500	.69000	154.00	.2659-01	.5891-02	.7902	.1350-03	.1124-01
64	87500	1.0640	153.00	.1956-01	-.1142-01	.5740	.9928-04	.8271-02
64	87500	1.4370	152.00	.5019-01	-.3066-02	.8856	.1532-03	.1276-01
64	87500	2.2930	151.00	.3294-01	-.9020-03	.9664	.1671-03	.1392-01
64	87500	2.6990	150.00	.1433-01	-.1554-01	.4204	.7272-04	.6058-02

0458 FUSELAGE/ELEVON-PRESSURES FUSELAGE

PAGE 212
(R2XF50)

RUN NUMBER	Z	X	TAP NO	P PSIA	CP	P/PINF	P/PIT	P/PT2
64	1.1250	.00000	161.00	.5969-02	-.2210-01	.1757	.3039-04	.2832-02
64	1.1250	.69000	160.00	.0000	.0000	.0000	.0000	.0000
64	1.1250	1.0640	159.00	.0000	.0000	.0000	.0000	.0000
64	1.1250	1.4370	158.00	.1306-01	-.1654-01	.3831	.6627-04	.5221-02
64	1.1250	2.2930	157.00	.3656-01	-.1944-02	1.073	.1855-03	.1545-01
64	1.1250	2.6990	156.00	.2280-01	-.8873-02	.6690	.1157-03	.9640-02
64	1.3750	0	167.00	.0000	.0000	.0000	.0000	.0000
0	1.3750	.69000	166.00	.0000	.0000	.0000	.0000	.0000
64	1.3750	1.0640	165.00	.9185-02	-.1958-01	.2695	.4661-04	.3683-02
64	1.3750	1.4370	164.00	-.2240	-.2030	-6.573	-.1137-02	-.9471-01
0	1.3750	2.2930	163.00	.0000	.0000	.0000	.0000	.0000
64	1.3750	2.6990	162.00	.4614-01	.9484-02	1.354	.2342-03	.1951-01

DATE 03 APR 79

AMES 0H58 HEATING AND PRESSURE DATA

0H58 FUSELAGE/ELEVON-PRESSURES FUSELAGE

FUSELAGE

RUN NUMBER	RN/FT	MACH	QINF PSI	PINF PSIA	TINF DEG. R	PT DEG. R	RVAL	BETA DEG.	MACH	LENGTH	
69	.5036+06	7.300	1.263	.3387-01	181.3	197.1	2010.	.1193-01	30.00	.0000	.1558-04

RUN NUMBER	VINF FT/SEC
69	4818.

PARAMETRIC DATA

ALPHA = 30.00	BETA = .0000	MACH = 7.300	LENGTH = 15.40
ELEVON = -10.00	RVAL = .5000		

TEST CONDITIONS

TINF	PT	TAV	ALPHA	BETA	PHI
DEG. R	PSIA	DEG. R	DEC.	DEC.	SLOSS/

RVAL					RIS
------	--	--	--	--	-----

TEST DATA

RUN NUMBER	Z	X	TAP NO	P	CP	P/PINF	P/P1	P/P12
69	12500		136.00	.1909	.1243	5.638	.9689-03	.8121-01
69	12500	1.0640	135.00	.1846	.1193	5.450	.9367-03	.7851-01
69	12500	1.4370	134.00	.1925	.1256	5.685	.9770-03	.8189-01
69	12500	2.2930	133.00	.1924	.1255	5.682	.9764-03	.8184-01
69	12500	2.6990	132.00	.2072	.1372	6.119	.1052-02	.8815-01
69	37500	69000	142.00	.3992-01	.4789-02	1.179	.2026-03	.1698-01
69	37500	1.0640	141.00	.7108-01	.2946-01	2.099	.3607-03	.3024-01
69	37500	1.4370	140.00	.1069	.5778-01	3.156	.5423-03	.4545-01
69	37500	2.2930	139.00	.2333	.1578	6.898	.1184-02	.9922-01
69	37500	2.6990	138.00	.2419	.1647	7.144	.1228-02	.1029
69	62500	69000	148.00	.5113-02	.2276-01	15.0	.2595-04	.2175-02
69	62500	1.0640	147.00	.2254-01	.8962-02	.6657	.1144-03	.9589-02
69	62500	1.4370	146.00	.3128-01	.2048-02	.9236	.1587-03	.1330-01
69	62500	2.2930	145.00	.6850-01	.2741-01	2.023	.3476-03	.2913-01
69	62500	2.6990	144.00	.6451-01	.4009-01	2.495	.4288-03	.3559-01
0	.87500	.00000	155.00	.0000	.0000	.0000	.0000	.0000
69	.87500	.69000	154.00	.1410-01	.1565-01	.4163	.7154-04	.5936-02
69	.87500	1.0640	153.00	.1153-01	.1768-01	.3404	.5849-04	.4903-02
69	.87500	1.4370	152.00	.2345-01	.8245-02	.6924	.1190-03	.9974-02
69	.87500	2.2930	151.00	.4142-01	.5982-02	1.223	.2102-03	.1762-04
69	.87500	2.6990	150.00	.2918-01	.3712-02	.8615	.1481-03	.1241-01

OH58 FUSELAGE/ELEVON-PRESSURES

FUSELAGE

RUN NUMBER	Z	X	TAP NO	P	CP	P/PINF	P/PIT	P/PIT2
			PSIA					
69	1.1250	.00000	161.00	-.2353-02	-.2867-01	-.6949-01	-.1194-04	-.1001-02
69	1.1250	.69000	160.00	.0000	.0000	.0000	.0000	.0000
69	1.1250	1.0640	159.00	.0000	.0000	.0000	.0000	.0000
69	1.1250	1.4370	158.00	.6251-02	-.2186-01	.1846	.3172-04	.2659-02
69	1.1250	2.2930	157.00	.3674-01	.2274-02	1.085	.1864-03	.1563-01
69	1.1250	2.6990	156.00	.2899-01	-.3858-02	.8561	.1471-03	.1233-01
0	1.3750	.00000	167.00	.0000	.0000	.0000	.0000	.0000
0	1.3750	.69000	166.00	.0000	.0000	.0000	.0000	.0000
69	1.3750	1.0640	165.00	-.1833-02	-.2826-01	-.5413-01	-.9302-05	-.7797-03
69	1.3750	1.4370	164.00	-.5039-01	-.6669-01	-1.488	-.2556-03	-.2143-01
0	1.3750	2.2930	163.00	.0000	.0000	.0000	.0000	.0000
69	1.3750	2.6990	162.00	.5299-01	.1513-01	1.565	.2689-03	.2254-01

DATE 03 APR 79

AMES OH58 HEATING AND PRESSURE DATA

OH58 FUSELAGE/ELEVON-PRESURES FUSELAGE

PAGE 215
(R2XF521)

FUSELAGE		ALPHA = 30.00		BETA = .0000		PARAMETRIC DATA			
RUN NUMBER	RM/FT /FT	MACH	QINF PSI	PINF PSIA	PTAV DEG. R	PRPTI DEG.	BETA DEG.	PHI DEG.	RHO SLUGS/ FT3
72	.7629+06	7.300	1.890	.5067-01	179.8	294.4	1995.	.1195-01	30.00
RUN NUMBER	VINF FT/SEC							.0000	.0000

72 4797.

TEST CONDITIONS

RUN NUMBER	Z	X	TAP NO	P PSIA	CP	P/PINF	P/P	P/PT2
72	12500	.69000	136.00	.3341	1499	6.593	.1135-02	.9497-01
72	12500	1.0640	135.00	.3710	1695	7.322	.1260-02	.1055
72	12500	1.4370	134.00	.3401	1531	6.711	.1155-02	.9668-01
72	12500	2.2930	133.00	.3265	1459	6.443	.1109-02	.9281-01
72	12500	2.6990	132.00	.3285	1470	6.484	.1116-02	.9340-01
72	12500	2.6990	142.00	.8285-01	1702-01	1.635	.2814-03	.2355-01
72	12500	2.6990	141.00	.1065	.2952-01	2.101	.3617-03	.3027-01
72	12500	1.0640	140.00	.1065	.4102-01	2.530	.4355-03	.3645-01
72	12500	1.4370	140.00	.1282	.5032-01	2.877	.4952-03	.4145-01
72	12500	2.2930	139.00	.1458	.1343	.4425-01	.2.650	.562-03
72	12500	2.6990	138.00	.1343	.3907-01	.6139-02	.7710	.1327-03
72	12500	2.6990	148.00	.6669-01	.8476-02	1.316	.2265-03	.1896-01
72	12500	1.0640	147.00	.9256-01	.2221-01	1.829	.3147-03	.2634-01
72	12500	1.4370	146.00	.1246	.3913-01	2.460	.4233-03	.3543-01
72	12500	2.2930	145.00	.1006	.2641-01	1.985	.3417-03	.2860-01
72	12500	2.6990	144.00	.0000	.0000	.0000	.0000	.0000
0	.87500	.00000	155.00	.5090-01	.6976-04	1.003	.1726-03	.1444-01
72	.87500	.69000	154.00	.5430-01	.1917-02	1.072	.1844-03	.1544-01
72	.87500	1.0640	153.00	.6427-01	.7193-02	1.268	.2183-03	.1827-01
72	.87500	1.4370	152.00	.8554-01	.1845-01	1.688	.2906-03	.2432-01
72	.87500	2.2930	151.00	.6591-01	.A062-02	1.301	.2239-03	.1874-01
72	.87500	2.6990	150.00					

TEST DATA

RUN NUMBER	Z	X	TAP NO	P PSIA	CP	P/PINF	P/P	P/PT2
72	12500	.69000	136.00	.3341	1499	6.593	.1135-02	.9497-01
72	12500	1.0640	135.00	.3710	1695	7.322	.1260-02	.1055
72	12500	1.4370	134.00	.3401	1531	6.711	.1155-02	.9668-01
72	12500	2.2930	133.00	.3265	1459	6.443	.1109-02	.9281-01
72	12500	2.6990	132.00	.3285	1470	6.484	.1116-02	.9340-01
72	12500	2.6990	142.00	.8285-01	1702-01	1.635	.2814-03	.2355-01
72	12500	2.6990	141.00	.1065	.2952-01	2.101	.3617-03	.3027-01
72	12500	1.0640	140.00	.1065	.4102-01	2.530	.4355-03	.3645-01
72	12500	1.4370	140.00	.1282	.5032-01	2.877	.4952-03	.4145-01
72	12500	2.2930	139.00	.1458	.1343	.4425-01	.2.650	.562-03
72	12500	2.6990	138.00	.1343	.3907-01	.6139-02	.7710	.1327-03
72	12500	2.6990	148.00	.6669-01	.8476-02	1.316	.2265-03	.1896-01
72	12500	1.0640	147.00	.9256-01	.2221-01	1.829	.3147-03	.2634-01
72	12500	1.4370	146.00	.1246	.3913-01	2.460	.4233-03	.3543-01
72	12500	2.2930	145.00	.1006	.2641-01	1.985	.3417-03	.2860-01
72	12500	2.6990	144.00	.0000	.0000	.0000	.0000	.0000
0	.87500	.00000	155.00	.5090-01	.6976-04	1.003	.1726-03	.1444-01
72	.87500	.69000	154.00	.5430-01	.1917-02	1.072	.1844-03	.1544-01
72	.87500	1.0640	153.00	.6427-01	.7193-02	1.268	.2183-03	.1827-01
72	.87500	1.4370	152.00	.8554-01	.1845-01	1.688	.2906-03	.2432-01
72	.87500	2.2930	151.00	.6591-01	.A062-02	1.301	.2239-03	.1874-01
72	.87500	2.6990	150.00					

DATE 03 APR 79

AMES OH58 HEATING AND PRESSURE DATA

OH58 FUSELAGE/ELEVON-PRESSURES

FUSELAGE

(R2XF5E)

PAGE 216

RUN NUMBER	Z	X	TAP NO	P PSIA	CP	P/PINF	P/PT	P/PT2
72	1.1250	.00000	161.00	.3859-01	-.6392-02	.7615	.1311-03	.1097-01
72	1.1250	.69000	160.00	.00000	.00000	.00000	.00000	.00000
72	1.1250	1.0640	159.00	.00000	.00000	.00000	.00000	.00000
72	1.1250	1.4370	158.00	.46662-01	-.2145-02	.9200	.1583-03	.1325-01
72	1.1250	2.2930	157.00	.7907-01	.1502-01	1.560	.2686-03	.2248-01
72	1.1250	2.6990	156.00	.6148-01	.5715-02	1.213	.2089-03	.1748-01
72	1.1250	2.6990	167.00	.00000	.00000	.6000	.00000	.00000
0	1.3750	.00000	166.00	.00000	.00000	.00000	.00000	.00000
0	1.3750	.69000	165.00	.3358-01	-.9040-02	.6628	.1141-03	.9548-02
72	1.3750	1.0640	164.00	.1755	.6604-01	3.463	.5961-03	.4989-01
72	1.3750	1.4370	163.00	.00000	.00000	.00000	.00000	.00000
0	1.3750	2.2930	162.00	.9567-01	.2380-01	1.888	.3250-03	.2720-01
72	1.3750	2.6990						

DATE 03 APR 79

AMES OH58 HEATING AND PRESSURE DATA

OH58 FUSELAGE / ELEVON-PRESURES

FUSELAGE

PARAMETRIC DATA

	ALPHA =	30.00	BETA =	.0000	MACH =	7.300	LENGTH =	14.40
	ELEVON =	10.00	RNL =	.7500				

TEST CONDITIONS

RUN NUMBER	RN/FT	MACH	QINF PSI	PINF PSIA	TINF DEG. R	PT DEG. R	TTAV DEG.	BETA DEG.	PHI DEG.	RHO SLUGS/ FT ³	
62	.7671+06	7.300	1.911	.5123-01	180.4	297.9	2001.	.1194-01	.30.00	.0000	.0000

RUN NUMBER	RN/SEC	VINF FT/SEC
62	4806.	

TEST DATA

RUN NUMBER	Z	X	TAP NO	P PSIA	CP	P/PINF	P/PT	P/PT2
62	125.00	.59000	136.00	.2134	.8484-01	4.165	.7164-03	.5899-01
62	125.00	1.0640	135.00	.1579	.5580-01	3.082	.5301-03	.4439-01
62	125.00	1.4370	134.00	.1011	.2607-01	1.973	.3393-03	.2842-01
62	125.00	2.2930	133.00	.7388-01	.1185-01	1.442	.2480-03	.2077-01
62	125.00	2.6990	132.00	.9794-01	.2444-01	1.912	.3288-03	.2754-01
62	125.00	69000	142.00	.6386-01	.6606-02	1.246	.2144-03	.1795-01
62	375.00	1.0640	141.00	.6654-01	.8007-02	1.299	.2234-03	.1871-01
62	375.00	1.4370	140.00	.9123-01	.2093-01	1.781	.3063-03	.2565-01
62	375.00	2.2930	139.00	.1355	.4409-01	2.645	.4549-03	.3810-01
62	375.00	2.6990	138.00	.1160	.3389-01	2.264	.3895-03	.3262-01
62	625.00	69000	148.00	.4191-01	-.4877-02	.8181	.1407-03	.1178-01
62	625.00	1.0640	147.00	.5215-01	-.4807-03	1.018	.1751-03	.1466-01
62	625.00	1.4370	146.00	.7458-01	.1221-01	1.456	.2504-03	.2097-01
62	625.00	2.2930	145.00	.9339-01	.2206-01	1.823	.3135-03	.2626-01
62	625.00	2.6990	144.00	.8733-01	.1889-01	1.705	.2932-03	.2455-01
0	.87500	0.00000	155.00	.00000	.00000	.00000	.00000	.00000
62	.87500	.69000	154.00	.5473-01	.1827-02	1.068	.1837-03	.1539-01
62	.87500	1.0640	153.00	.4444-01	-.3553-02	.8675	.1492-03	.1250-01
62	.87500	1.4370	152.00	.5466-01	-.1790-02	1.067	.1835-03	.1537-01
62	.87500	2.2930	151.00	.6694-01	.8216-02	1.306	.2217-03	.1882-01
62	.87500	2.6990	150.00	.4608-01	-.2695-02	.8995	.1547-03	.1295-01

AMES OH-58 HEATING AND PRESSURE DATA

OH58 FUSELAGE/ELEVON-PRESSURES

FUSELAGE

RUN NUMBER	Z	X	TAP NO	P PSIA	CP	P/PINF	P/PT	P/P _{T2}
62	1.1250	.00000	161.00	.2832-01	-.1199-01	.5528	.9508-04	.7963-02
62	1.1250	.69000	160.00	.0000	.0000	.0000	.0000	.0000
62	1.1250	1.0640	159.00	.0000	.0000	.0000	.0000	.0000
62	1.1250	1.4370	158.00	.4353-01	-.4033-02	.8496	.1461-03	.1244-01
62	1.1250	2.2930	157.00	.5546-01	.2210-02	1.082	.1862-03	.1559-01
62	1.1250	2.6990	156.00	.5023-01	-.5234-03	.9805	.1686-03	.1412-01
62	1.1250	0	167.00	.0000	.0000	.0000	.0000	.0000
0	1.3750	.69000	166.00	.0000	.0000	.0000	.0000	.0000
0	1.3750	1.0640	165.00	.3924-01	-.6273-02	.7660	.1318-03	.1103-01
62	1.3750	1.4370	164.00	-.1454	-.1029	-2.839	-.4883-03	-.4089-01
62	1.3750	2.2930	163.00	.0000	.0000	.0000	.0000	.0000
0	1.3750	2.6990	162.00	.6449-01	.6935-02	1.259	.2165-03	.1813-01

DATE 03 APR 79

AMES OH58 HEATING AND PRESSURE DATA

OH58 FUSELAGE/ELEVON-PRESSURES FUSELAGE

FUSELAGE

RUN NUMBER	RN/FT	MACH	QINF PSI	PINF PSIA	ALPHA = 30.00	BETA RN/L	0000	MACH = .7500	7.300	LENGTH = 14.40
68	.7541+06	7.300	1.898	.5087-01	181.7	296.1	2014.	.1193-01	30.08	.0000
										.2350-04

TEST CONDITIONS

RUN NUMBER	RN/FT	MACH	QINF PSI	PINF PSIA	ALPHA = -10.00	BETA RN/L	0000	MACH = .7500	7.300	LENGTH = 14.40
68	.7541+06	7.300	1.898	.5087-01	181.7	296.1	2014.	.1193-01	30.08	.0000
										.2350-04

RUN NUMBER RN/FT MACH QINF
68 .7500 1.2500 1.0650 1.3500 1.3500 1.3500
68 .7500 1.2500 1.4370 1.3500 1.3300 1.3300
68 .7500 1.2500 2.2930 1.3200 1.3200 1.3200
68 .7500 1.2500 2.6990 1.4200 1.4200 1.4200
68 .7500 1.2500 690000 1.0640 1.0640 1.0640
68 .7500 1.2500 375000 1.4370 1.4370 1.4370
68 .7500 1.2500 375000 2.2930 2.2930 2.2930
68 .7500 1.2500 375000 2.6990 2.6990 2.6990
68 .62500 1.0640 1.0640 1.0640 1.0640 1.0640
68 .62500 1.0640 1.4370 1.4370 1.4370 1.4370
68 .62500 1.0640 2.2930 2.2930 2.2930 2.2930
68 .62500 1.0640 2.6990 2.6990 2.6990 2.6990
68 .87500 .00000 .00000 .00000 .00000 .00000
68 .87500 .60000 154.00 154.00 154.00 154.00
68 .87500 1.0640 153.00 152.00 152.00 152.00
68 .87500 1.4370 151.00 151.00 151.00 151.00
68 .87500 2.2930 150.00 150.00 150.00 150.00
68 .87500 2.6990 150.00 150.00 150.00 150.00

TEST DATA

RUN NUMBER	Z	X	TAP NO	P PSIA	CP	P/PINF	P/PIT	P/P12
68	12500	.69000	136.00	.3499	.1576	6.879	.1182-02	.9209-01
68	12500	1.0650	135.00	.3315	.1479	6.516	.1119-02	.9186-01
68	12500	1.4370	135.00	.3337	.1491	6.560	.1127-02	.9150-01
68	12500	2.2930	133.00	.3087	.1359	6.069	.1043-02	.8742-01
68	12500	2.6990	132.00	.3152	.1393	6.196	.1064-02	.8325-01
68	12500	690000	142.00	.8353-01	.1721-01	2.642	.2821-03	.2365-01
68	12500	375000	141.00	.1276	.4043-01	2.508	.4109-03	.3613-01
68	12500	375000	140.00	.1778	.6690-01	3.495	.6005-03	.5035-01
68	12500	375000	139.00	.3563	.1610	7.004	.1203-02	.1009
68	12500	375000	138.00	.3680	.1671	7.234	.1243-02	.1042
68	12500	690000	148.00	.2701-01	.1257-01	.5309	.9121-04	.7648-02
68	12500	690000	147.00	.4839-01	.1308-02	.9512	.1624-03	.1370-01
68	12500	690000	146.00	.6896-01	.9481-02	1.354	.2325-03	.1373-01
68	12500	690000	145.00	.1189	.7582-01	2.336	.4014-03	.3445-01
68	12500	690000	144.00	.1476	.5097-01	2.901	.4944-03	.4179-01
68	12500	0	155.00	.0000	.0000	.0000	.0000	.0000
68	12500	.87500	154.00	.3655-01	.7493-02	.7205	.1239-03	.1028-01
68	12500	.87500	153.00	.3699-01	.7314-02	.7272	.1249-03	.1047-01
68	12500	.87500	152.00	.4987-01	.5267-03	.9804	.1680-03	.1412-01
68	12500	.87500	151.00	.8000-01	.1535-01	1.573	.2702-03	.2265-01
68	12500	.87500	150.00	.6362-01	.6716-02	1.251	.2146-03	.1601-01

PAGE 219
IR2XFS41

OH58 FUSELAGE/ELEVON-PRESSURES

FUSELAGE

RUN NUMBER	Z	X	TAP NO	P PSIA	CP	P/PINP	P/PIT	P/P12
68	1.1250	.00000	161.00	.1762-01	-.1752-01	.3463	.5949-04	.4998-02
68	1.1250	.69000	160.00	.0000	.0000	.0000	.0000	.0000
68	1.1250	1.0640	159.00	.0000	.0000	.0000	.0000	.0000
68	1.1250	1.4370	158.00	.3246-01	-.9700-02	.6382	.1096-03	.9193-02
68	1.1250	2.2930	157.00	.6769-01	.8862-02	1.331	.2286-03	.1917-01
68	1.1250	2.6990	156.00	.5849-01	.4009-02	1.149	.1975-03	.1666-01
0	1.3750	.00000	167.00	.0000	.0000	.0000	.0000	.0000
0	1.3750	.69000	166.00	.0000	.0000	.0000	.0000	.0000
68	1.3750	1.0640	165.00	.2184-01	-.1530-01	.4293	.7375-04	.6188-02
68	1.3750	1.4370	164.00	.1375	.4564-01	.2703	.4643-03	.3893-01
0	1.3750	2.2930	163.00	.0000	.0000	.0000	.0000	.0000
68	1.3750	2.6990	162.00	.7393-01	.1215-01	1.453	.2497-03	.2093-01

DATE 03 APR 79

AMES OH58 HEATING AND PRESSURE DATA

OH58 FUSELAGE/ELEVON-PRESURES FUSELAGE

PAGE 221
(R2XF55)

FUSELAGE

RUN NUMBER	RN/FT	MACH	QINF PSI	PINF PSIA	TINF DEG. R	PTA DEG. R	TTAV DEG. R	PARAMETRIC DATA
71	.1023+07	7.300	2.503	.6709-01	178.2	389.2	1979.	ALPHA = 30.00 ELVON = .0000 RN/L = 1.000 LENGTH = 14.40

TEST CONDITIONS

RUN NUMBER	RN/FT	MACH	QINF PSI	PINF PSIA	TINF DEG. R	PTA DEG. R	TTAV DEG. R	PARAMETRIC DATA
71	.1023+07	7.300	2.503	.6709-01	178.2	389.2	1979.	ALPHA = 30.00 ELVON = .0000 RN/L = 1.000 LENGTH = 14.40

71 4777.

TEST DATA

RUN NUMBER	Z	X	TAP NO	P PSIA	CP	P/PINF	P/PT	P/PT2	
71	12500		69000	136.00	.4179	.1402	6.228	1074-02	8673-01
71	12500		1.0640	135.00	.4775	.1640	7.117	1227-02	1.025
71	12500		1.4370	134.00	.4318	.1457	6.437	1110-02	.9273-01
71	12500		2.2930	133.00	.4123	.1379	6.146	1059-02	.8854-01
71	12500		2.6990	132.00	.4092	.1367	6.098	1051-02	.8786-01
71	12500		69000	142.00	.9049-01	.9351-02	1.349	2.325-03	1.943-01
71	12500		1.0640	141.00	.1227	.2221-01	1.829	.3152-03	.2634-01
71	12500		1.4370	140.00	.1524	.3409-01	2.272	.3916-03	.3273-01
71	12500		2.2930	139.00	.1661	.3957-01	2.476	.4268-03	.3567-01
71	12500		2.6990	138.00	.1473	.3205-01	2.196	.3785-03	.3163-01
71	12500		69000	148.00	.3750-01	-.1182-01	.5589	.9634-04	.8052-02
71	12500		1.0640	147.00	.6734-01	.1007-03	1.004	1.730-03	.1446-01
71	12500		1.4370	146.00	.6802-01	.8363-02	1.312	.2262-03	.1890-01
71	12500		2.2930	145.00	.1294	.2489-01	1.929	.3325-03	.2778-01
71	12500		2.6990	144.00	.1098	.1708-01	1.637	.2822-03	.2359-01
71	0		0.0000	155.00	.0000	.0000	.0000	.0000	.0000
71	.87500		69000	154.00	.5350-01	-.5432-02	.7974	.1375-03	.1149-01
71	.87500		1.0640	153.00	.4848-01	-.7438-02	.7226	.1246-03	.1041-01
71	.87500		1.4370	152.00	.6434-01	-.1097-02	.9551	.1653-03	.1382-01
71	.87500		2.2930	151.00	.9038-01	.9305-02	1.347	.2322-03	.1941-01
71	.87500		2.6990	150.00	.6804-01	.3807-03	1.014	.1748-03	.1461-01

0158 FUSELAGE/ELEVON-PRESSESURES FUSELAGE

卷之三

RUN NUMBER	Z	X	TAP NO	P PSIA	CP	P/PINF	P/PT	P/PT2
71	1.250	.00000	161.00	.2474-01	-.1692-01	.3687	.6356-04	.5312-02
	1.250	.69000	160.00	.0000	.0000	.0000	.0000	.0000
	1.250	1.0640	159.00	.0000	.0000	.0000	.0000	.0000
	1.250	1.4370	158.00	.3827-01	-.1152-01	.5704	.8233-04	.8218-02
	1.250	2.2930	157.00	.7426-01	-.2864-02	1.107	.1908-03	.1595-01
	1.250	2.6990	156.00	.6225-01	-.1931-02	.9279	.1600-03	.1337-01
	1.250	3.7750	167.00	.0000	.0000	.0000	.0000	.0000
	1.3750	.69000	166.00	.0000	.0000	.0000	.0000	.0000
	1.3750	1.0640	165.00	.3088-11	-.1447-01	.4603	.7935-04	.6632-02
	1.3750	1.4370	164.00	-.1173	-.7358-01	-.7419	-.3014-03	-.2519-01
	1.3750	2.2930	163.00	.0000	.0000	.0000	.0000	.0000
	1.3750	2.6990	162.00	.7565-01	.3419-02	1.128	.1944-03	.1624-01

DATE 03 APR 79

AMES OH-58 HEATING AND PRESSURE DATA

PAGE 223
(R2XF56)

OH-58 FUSELAGE/ELEVON-PRESURES FUSELAGE

FUSELAGE

	ALPHA = 30.00	BETA = 0000	MACH = 7.300	LENGTH = 14.40
	ELEVON = 10.00	RNL = 1.000		

TEST CONDITIONS

RUN NUMBER	RN/FT /FT	MACH	QINF PSI	PINF PSIA	TINF DEG. R	PTA DEG. R	TTAV DEG.	PT2PT1	ALPHA DEG.	BETA DEG.	PHI DEG.	RHO SLUGS/ FT ³
61	.1034+07	7.300	2.479	.6647-01	175.8	384.6	1954.	.1199-01	30.00	.0000	.0000	.3173-04

61 4744.
RUN NUMBER RN/FT SEC

TEST DATA

RUN NUMBER	Z	X	TAP NO	P PSIA	CP	P/PINF	P/PT	P/PT2
61	12500	.69000	136.00	.2893	.8989-01	4.353	.7522-03	.6272-01
61	12500	1.0640	135.00	.2124	.5887-01	3.196	.5523-03	.4605-01
61	12500	1.4370	134.00	.1592	.3741-01	2.396	.4140-03	.3452-01
61	12500	2.2930	133.00	.9925-01	.1323-01	1.493	.2581-03	.2152-01
61	12500	2.6990	132.00	.1521	.3456-01	2.289	.3956-03	.3298-01
61	12500	2.6990	142.00	.1194	.2135-01	1.796	.3104-03	.2588-01
61	12500	2.6990	141.00	.1093	.1728-01	1.645	.2842-03	.2370-01
61	12500	1.0640	140.00	.1613	.3826-01	2.427	.4194-03	.3497-01
61	12500	1.4370	140.00	.1982	.5314-01	2.982	.5154-03	.4297-01
61	12500	2.2930	159.00	.1550	.3570-01	2.332	.4029-03	.3360-01
61	12500	2.6990	138.00	.1198	.1988-02	1.074	.1856-03	.1548-01
61	12500	2.6990	148.00	.7140-01	.3571-02	1.133	.1958-03	.1633-01
61	12500	1.0640	147.00	.7532-01	.3571-02	1.133	.1958-03	.1633-01
61	12500	1.4370	146.00	.1454	.3185-01	2.188	.3781-03	.3153-01
61	12500	2.2930	145.00	.1272	.2450-01	1.914	.3307-03	.2758-01
61	12500	2.6990	144.00	.1042	.1522-01	1.568	.2709-03	.2259-01
61	0	.00000	155.00	.00000	.00000	.0000	.0000	.0000
61	.87500	.69000	154.00	.1226	.2262-01	1.844	.3186-03	.2657-01
61	.87500	1.0640	153.00	.6729-01	.3301-03	1.012	.1749-03	.1459-01
61	.87500	1.4370	152.00	.1116	.1821-01	1.679	.2902-03	.2419-01
61	.87500	2.2930	151.00	.9979-01	.1344-01	1.501	.2594-03	.2163-01
61	.87500	2.6990	150.00	.6355-01	-.1178-02	.9561	.1652-03	.1378-01

0158 FUSELAGE/ELEVON-PRESURES							FUSELAGE	
RUN NUMBER	Z	X	TAP NO	P PSIA	CP	P/PINF	P/PT	P/PT2
61	-1.250	.00000	161.00	.3394-01	-.1312-01	.5106	.8823-04	.7356-02
61	-1.250	.69000	160.00	.0000	.0000	.0000	.0000	.0000
61	-1.250	.0640	159.00	.0000	.0000	.0000	.0000	.0000
61	-1.250	1.4370	158.00	.6679-01	.1293-03	1.005	.1736-03	.1448-01
61	-1.250	2.2930	157.00	.8583-01	.7807-02	1.291	.2223-03	.1860-01
61	-1.250	2.6990	156.00	.9297-01	.1069-01	1.399	.2417-03	.2015-01
61	-1.250	.00000	167.00	.0000	.0000	.0000	.0000	.0000
0	-1.3750	.69000	166.00	.0000	.0000	.0000	.0000	.0000
0	-1.3750	1.0540	165.00	.0000	.0000	.0000	.0000	.0000
61	-1.3750	1.4370	164.00	-1.341	-.8088-01	-2.017	-.3486-03	-.2906-01
61	-1.3750	2.2930	163.00	.0000	.0000	.0000	.0000	.0000
0	-1.3750	2.6990	162.00	.7207-01	.2260-02	1.084	.1874-03	.1562-01

DATE 03 APR 79

AMES OH5B HEATING AND PRESSURE DATA

PAGE 225

(R2XF57)

FUSELAGE

0H5B FUSELAGE/ELEVON-PRESSURES FUSELAGE

PARAMETRIC DATA

	ALPHA = 30.00	BETA RN/VL = .0000	MACH = 7.300	LENGTH = 14.40							
	ELEVN = -10.00										
RUN NUMBER	AV/FT	MACH	PINF PSIA	TINF DEG. R	PTAV PSIA	PT2PTI	ALPHA DEG.	BETA DEG.	PHI DEG.	RHO SLUGS/ F13	
67	.1018+07	7.300	2.505	.6714-01	178.8	399.7	1985.	.1196-01	.30.00	.0000	.0000
RUN NUMBER	VINF FT/SEC										
67	4785.										

TEST CONDITIONS

RUN NUMBER	Z	X	TAP NO	P PSIA	CP	P/PINF	P/PIT	P/Pt2
67	12500	.69000	36.00	.4229	.1421	6.299	.1085-02	.9075-01
67	12500	1.0640	35.00	.3789	.1245	5.644	.9723-03	.8131-01
67	12500	1.4370	34.00	.3815	.1255	5.681	.9788-03	.8185-01
67	12500	2.2930	33.00	.3643	.1186	5.425	.9347-03	.7816-01
67	12500	2.6990	32.00	.3833	.1262	5.709	.9836-03	.8225-01
67	12500	42.00	1081	.1636-01	.1610	.2774-03	.2320-01	
67	37500	.69000	141.00	.1610	.3747-01	2.398	.4131-03	.3454-01
67	37500	1.0640	141.00	.2368	.6776-01	3.527	.6077-03	.5082-01
67	37500	1.4370	140.00	.4616	.1575	6.875	.1184-02	.9905-01
67	37500	2.2930	139.00	.4727	.1619	7.041	.1213-02	.1014
67	37500	2.6990	138.00	.3675-01	.1213-01	.5474	.9430-04	.7986-02
67	62500	.69000	149.00	.5805-01	.3633-02	.8646	.1489-03	.1246-01
67	62500	1.0640	147.00	.7706-01	.3962-02	1.148	.1977-03	.1654-01
67	62500	1.4370	146.00	.1377	.2815-01	2.050	.3532-03	.2954-01
67	62500	2.2930	145.00	.1799	.4501-01	2.679	.4615-03	.3859-01
67	62500	2.6990	144.00	.0000	.0000	.0000	.0000	.0000
0	.87500	.00000	155.00	.5351-01	.5440-02	.7971	.1373-03	.1148-01
67	.87500	.69000	154.00	.4472-01	.8952-02	.6660	.1147-03	.9595-02
67	.87500	1.0640	153.00	.6012-01	.2805-02	.8954	.1543-03	.1290-01
67	.87500	1.4370	152.00	.9295-01	.1031-01	1.384	.2385-03	.1994-01
67	.87500	2.2930	151.00	.7101-01	.1546-02	1.058	.1822-03	.1524-01
67	.87500	2.6990	150.00					

TEST DATA

RUN NUMBER	Z	X	TAP NO	P PSIA	CP	P/PINF	P/PIT	P/Pt2
67	12500	.69000	36.00	.4229	.1421	6.299	.1085-02	.9075-01
67	12500	1.0640	35.00	.3789	.1245	5.644	.9723-03	.8131-01
67	12500	1.4370	34.00	.3815	.1255	5.681	.9788-03	.8185-01
67	12500	2.2930	33.00	.3643	.1186	5.425	.9347-03	.7816-01
67	12500	2.6990	32.00	.3833	.1262	5.709	.9836-03	.8225-01
67	12500	42.00	1081	.1636-01	.1610	.2774-03	.2320-01	
67	37500	.69000	141.00	.1610	.3747-01	2.398	.4131-03	.3454-01
67	37500	1.0640	141.00	.2368	.6776-01	3.527	.6077-03	.5082-01
67	37500	1.4370	140.00	.4616	.1575	6.875	.1184-02	.9905-01
67	37500	2.2930	139.00	.4727	.1619	7.041	.1213-02	.1014
67	37500	2.6990	138.00	.3675-01	.1213-01	.5474	.9430-04	.7986-02
67	62500	.69000	149.00	.5805-01	.3633-02	.8646	.1489-03	.1246-01
67	62500	1.0640	147.00	.7706-01	.3962-02	1.148	.1977-03	.1654-01
67	62500	1.4370	146.00	.1377	.2815-01	2.050	.3532-03	.2954-01
67	62500	2.2930	145.00	.1799	.4501-01	2.679	.4615-03	.3859-01
67	62500	2.6990	144.00	.0000	.0000	.0000	.0000	.0000
0	.87500	.00000	155.00	.5351-01	.5440-02	.7971	.1373-03	.1148-01
67	.87500	.69000	154.00	.4472-01	.8952-02	.6660	.1147-03	.9595-02
67	.87500	1.0640	153.00	.6012-01	.2805-02	.8954	.1543-03	.1290-01
67	.87500	1.4370	152.00	.9295-01	.1031-01	1.384	.2385-03	.1994-01
67	.87500	2.2930	151.00	.7101-01	.1546-02	1.058	.1822-03	.1524-01
67	.87500	2.6990	150.00					

DATE 03 APR 79

AMES OH58 HEATING AND PRESSURE DATA

OH58 FUSELAGE/ELEVON-PRESSES FUSELAGE

RUN NUMBER	Z	X	TAP NO	P PSIA	CP	P/PINF	P/PT	P/PT2
67	1.1250	.00000	161.00	.1316-01	-.2155-01	.1960	.3377-04	.2824-02
67	1.1250	.69000	160.00	.0000	.0000	.0000	.0000	.0000
67	1.1250	1.0640	159.00	.0000	.0000	.0000	.0000	.0000
67	1.1250	1.4370	158.00	.4012-01	-.1079-01	.5976	.1030-03	.8609-02
67	1.1250	2.2930	157.00	.6141-01	-.2288-02	.9147	.1575-03	.1318-01
67	1.1250	2.6990	156.00	.7454-01	-.2953-02	.1110	.1913-03	.1559-01
67	0	.3750	167.00	.0000	.0000	.0000	.0000	.0000
0	1.3750	.69000	166.00	.0000	.0000	.0000	.0000	.0000
67	1.3750	1.0640	165.00	.2846-01	-.1545-01	.4238	.7302-04	.6106-02
67	1.3750	1.4370	164.00	-.1653	-.9280-01	-2.462	-.4241-03	-.3546-01
0	1.3750	2.2930	163.00	.0000	.0000	.0000	.0000	.0000
67	1.3750	2.6990	162.00	.5153-01	-.6231-02	.7676	.1322-03	.1106-01

PAGE 226
(R2XF57)

DATE 03 APR 79

AMES OH5B HEATING AND PRESSURE DATA

0158 FUSELAGE/ELEVON-PRESSURES FUSELAGE

PAGE 227
(R2XF501)

FUSELAGE

RUN NUMBER	RM/FT /FT	MACH	QINF PSI	PINF PSIA	TINF DEG. R	PT PSIA	TTAV DEG. R	P12P11	ALPHA DEG.	BETA DEG.	PHI DEG.	RHO SLUGS/ FT ³
RUN NUMBER	FT/SEC	VINF										
70	1482.07	7.300	3.766	.1010	182.9	588.4	2026.	.1191-01	30.00	.0000	.0000	.4632-04
70	4839.											

FUSELAGE

TEST CONDITIONS												
ALPHA = 30.00	ELEVON = .0000	BETA RM/L = .5000	MACH = 7.300	LENGTH = 14.40								
					P12P11	ALPHA DEG.	BETA DEG.	PHI DEG.	RHO SLUGS/ FT ³			

TEST DATA

RUN NUMBER	Z	X	TAP NO	P _{PSIA}	C _P	P/P _{INF}	P/P _T	P/P _{P12}
70	12500		60000	136.00	6.113	1.355	6.055	1039-02
70	12500		1.0640	35.00	7.003	1.592	6.937	1190-02
70	12500		1.4370	34.00	6.388	1.428	6.327	1086-02
70	12500		2.2930	33.00	5.976	1.319	5.919	1016-02
70	12500		2.6990	32.00	5.868	1.290	5.813	9973-03
70	12500		42.00	1.338	8720-02	1.325	2.274	8372-01
70	12500		1.0640	141.00	1.754	1.977-01	1.738	2274-03
70	12500		1.4370	140.00	.2278	3.368-01	2.257	2981-03
70	12500		2.2930	139.00	.2296	3.416-01	2.274	3872-03
70	12500		2.6990	138.00	.2122	.2955-01	2.102	3.250-01
70	12500		148.00	.5453-01	.1233-01	5.401	.9268-04	3276-01
70	12500		147.00	9327-01	.2041-02	9239	.1585-03	3.028-01
70	12500		146.00	1238	.6078-02	1.227	.2105-03	1.919-03
70	12500		145.00	1717	.1879-01	1.701	.2919-03	2.450-01
70	12500		144.00	1694	.1818-01	1.678	.2879-03	2.417-01
0	0		0.0000	155.00	.0000	.0000	.0000	.0000
70	87500		69000	154.00	.7976-01	.5528-02	.7900	.1356-03
70	87500		1.0640	153.00	.6460-01	.9654-02	.6399	.1138-01
70	87500		1.4370	152.00	.8694-01	.3722-02	.8612	.0980-03
70	87500		2.2930	151.00	.1360	.9306-02	1.347	.1240-01
70	87500		2.6990	150.00	.1038	.7578-03	1.028	.1940-01

OH58 FUSELAGE/ELEVON-PRESSURES

FUSELAGE

RUN NUMBER	Z	X	TAP NO	P PSIA	CP	P/PINF	P/PT	P/PT2
70	1.1250	.00000	161.00	.3039-01	-.1874-01	.3011	.5165-04	.4335-02
70	1.1250	.69000	160.00	.0000	.0000	.0000	.0000	.0000
70	1.1250	1.0640	159.00	.0000	.0000	.0000	.0000	.0000
70	1.1250	1.4370	158.00	.6009-01	-.1085-01	.5952	.1021-03	.8573-02
70	1.1250	2.2930	157.00	.1053	.1142-02	1.043	.1789-03	.1502-01
70	1.1250	2.6990	156.00	.9955-01	-.3730-03	.9861	.1692-03	.1420-01
70	1.1250	2.6990	162.00	.0000	.0000	.0000	.0000	.0000
0	1.3750	.00000	161.00	.0000	.0000	.0000	.0000	.0000
0	1.3750	.69000	166.00	.0000	.0000	.0000	.0000	.0000
70	1.3750	1.0640	165.00	.6752-01	-.8878-02	.6688	.1148-03	.9634-02
70	1.3750	1.4370	164.00	.7838-01	-.5994-02	.7764	.1332-03	.1118-01
0	1.3750	2.2930	163.00	.0000	.0000	.0000	.0000	.0000
70	1.3750	2.6990	162.00	.1007	-.7974-04	.9970	.1711-03	.1435-01

DATE 03 APR 79

AMES OH58 HEATING AND PRESSURE DATA

OH58 FUSELAGE/ELEVON-PRESSURES FUSELAGE

FUSELAGE

ALPHA = 30.00 BETA RN/L = .0000 MACH = 7.300 LENGTH = 14.40

ELEVON = 10.00 RNL = 1.500

TEST CONDITIONS

RUN NUMBER	RN/FT /FT	MACH	QINF PS1	PINF PSIA	TINF DEG. R.	PT PSIA	TTAV DEG. R	PR2P11	ALPHA DEG.	BETA DEG.	PHI DEG.	RHO SLUGS/ FT ³	4629-04
63	.1482+.07	7.300	3.756	.1007	182.6	586.7	2023.	.1192-.01	30.00	.0000	.0000		

RUN NUMBER VINF FT/SEC
63 4834.

TEST DATA

RUN NUMBER	Z	X	TAP NO	P PSIA	CP	P/PINF	P/PT	P/PT2
63	12500	.69000	136.00	.4014	.8004-01	3.986	.6841-03	.5741-01
63	12500	1.0640	135.00	.3037	.5405-01	3.016	.5177-03	.4344-01
63	12500	1.4370	134.00	.1974	.2575-01	1.961	.3365-03	.2824-01
63	12500	2.2930	133.00	.1290	.7530-02	1.281	.2199-03	.1845-01
63	12500	2.6990	132.00	.1640	.1685-01	1.629	.2795-03	.2346-01
63	12500	3.7500	142.00	.1281	.7298-02	1.272	.2184-03	.1833-01
63	12500	1.0610	141.00	.1273	.7098-02	1.264	.2170-03	.1821-01
63	12500	1.4370	140.00	.1945	.2498-01	1.932	.3316-03	.2783-01
63	12500	2.2930	139.00	.2752	.4647-01	2.733	.4691-03	.3937-01
63	12500	2.6990	138.00	.2225	.3244-01	2.210	.3793-03	.3183-01
63	12500	.69000	148.00	.6446-01	.9646-02	.6402	.1099-03	.9221-02
63	12500	1.0610	147.00	.8499-01	.4182-02	.8440	.1449-03	.1216-01
63	12500	1.4370	146.00	.1232	.5977-02	.1223	.2099-03	.1762-01
63	12500	2.2930	145.00	.1735	.1939-01	.1.723	.2958-03	.2482-01
63	12500	2.6990	144.00	.1524	.1375-01	1.513	.2597-03	.2179-01
63	0	.87500	.00000	.155.00	.0000	.0000	.0000	.0000
63	.87500	.69000	.154.00	.1045	.1019-02	1.038	.1782-03	.1495-01
63	.87500	1.0640	.153.00	.6791-01	-.8730-02	.6744	.1157-03	.9713-02
63	.87500	1.4370	.152.00	.8860-01	-.3222-02	.8798	.1510-03	.1267-01
63	.87500	2.2930	.151.00	.1130	.3288-02	1.123	.1927-03	.1617-01
63	.87500	2.6990	.150.00	.9126-01	-.2513-02	.9062	.1555-03	.1305-01

0458 FUSELAGE/ELEVON-PRESSURES FUSELAGE

RUN NUMBER	Z	X	TAP NO	P PSIA	CP	P/PINF	P/PT	P/PT2
63	1.1250	.00000	161.00	.4157-01	-.1574-01	.4128	.7085-04	.5946-02
63	1.1250	.69000	160.00	.0000	.0000	.0000	.0000	.0000
63	1.1250	1.0640	159.00	.0000	.0000	.0000	.0000	.0000
63	1.1250	1.4370	158.00	.6834-01	-.8616-02	.6786	.1165-03	.9775-02
63	1.1250	2.2930	157.00	.9607-01	-.1231-02	.9541	.1638-03	.1374-01
63	1.1250	2.6990	156.00	.1002	-.1391-03	.9948	.1707-03	.1433-01
63	1.3750	.00000	167.00	.0000	.0000	.0000	.0000	.0000
0	1.3750	.69000	166.00	.0000	.0000	.0000	.0000	.0000
0	1.3750	1.0640	165.00	.7718-01	-.6262-02	.7664	.1315-03	.1104-01
63	1.3750	1.4370	164.00	2.823	.7246	28.03	.4811-02	.4037
63	1.3750	2.2930	163.00	.0000	.0000	.0000	.0000	.0000
0	1.3750	2.6990	162.00	.9286-01	-.2C3B-02	.9221	.1583-03	.1328-01
63								

DATE 03 APR 79

AMES OH58 HEATING AND PRESSURE DATA

PAGE 231

(R2XF60)

FUSELAGE

0H58 FUSELAGE/ELEVON-PRESSURES

FUSELAGE

FUSELAGE		ALPHA = 30.00 ELEVON = -10.00		BETA RN/L	MACH	LENGTH = 14.40						
RUN NUMBER	RN/FT /FT	MACH	0IN# PSI	TINF DEG. R	PT PSIA	PTAV DEG. R	MACH	7.300	LENGTH = 14.40			
66	.1440+07	7.300	3.708	.9541-01	184.5	580.4	2043.	.1169-01	30.00	.0000	.0000	.4520-04

RUN NUMBER 4861.
 0IN# PSI .9541-01
 VINF FT/SEC 3.708

TEST CONDITIONS

RUN NUMBER	Z	X	TAP NO	P PSIA	CP	P/PINF	P/PT	P/PT2
66	12500	.69000	136.00	.6507	.1487	6.545	.1121-02	.9427-01
66	12500	1.0640	135.00	.5580	.1237	5.613	.9614-03	.8064-01
66	12500	1.4370	134.00	.5620	.1247	5.653	.9683-03	.8142-01
66	12500	2.2930	133.00	.5484	.1211	5.517	.9449-03	.7945-01
66	12500	2.6990	132.00	.5577	.1236	6.610	.9609-03	.8080-01
66	12500	.69000	142.00	.1708	.1924-01	7.718	.2942-03	.2974-01
66	12500	.37500	141.00	.2532	.4146-01	2.547	.4362-03	.3668-01
66	12500	1.0640	140.00	.3591	.7002-01	3.612	.6187-03	.5202-01
66	12500	1.4370	139.00	.7002	.1620	7.043	.1206-02	.1014
66	12500	2.2930	138.00	.7432	.1736	7.475	.1280-02	.1077
66	12500	2.6990	148.00	.6714-01	.8703-02	6.754	.1157-03	.9727-02
66	12500	.69000	147.00	.1057	.1692-02	1.063	.1821-03	.1531-01
66	12500	1.0640	146.00	.1292	.8040-02	1.300	.2227-03	.1872-01
66	12500	1.4370	145.00	.2184	.3207-01	2.196	.3762-03	.3163-01
66	12500	2.2930	144.00	.2803	.4876-01	2.819	.4829-03	.4060-01
66	12500	2.6990	155.00	.0000	.0000	.0000	.0000	.0000
0	0	0	0	0	0	0	0	0
66	0.87500	154.00	.1006	.3247-03	1.012	.1734-03	.1458-01	
66	0.87500	153.00	.8110-01	-.4938-02	.8158	.1397-03	.1175-01	
66	0.87500	152.00	.1024	.8052-03	1.030	.1764-03	.1484-01	
66	0.87500	151.00	.1488	.1332-01	1.497	.2564-03	.2156-01	
66	0.87500	150.00	.1339	.9293-02	1.347	.2307-03	.1940-01	

TEST DATA

RUN NUMBER	Z	X	TAP NO	P PSIA	CP	P/PINF	P/PT	P/PT2
66	12500	.69000	136.00	.6507	.1487	6.545	.1121-02	.9427-01
66	12500	1.0640	135.00	.5580	.1237	5.613	.9614-03	.8064-01
66	12500	1.4370	134.00	.5620	.1247	5.653	.9683-03	.8142-01
66	12500	2.2930	133.00	.5484	.1211	5.517	.9449-03	.7945-01
66	12500	2.6990	132.00	.5577	.1236	6.610	.9609-03	.8080-01
66	12500	.69000	142.00	.1708	.1924-01	7.718	.2942-03	.2974-01
66	12500	.37500	141.00	.2532	.4146-01	2.547	.4362-03	.3668-01
66	12500	1.0640	140.00	.3591	.7002-01	3.612	.6187-03	.5202-01
66	12500	1.4370	139.00	.7002	.1620	7.043	.1206-02	.1014
66	12500	2.2930	138.00	.7432	.1736	7.475	.1280-02	.1077
66	12500	2.6990	148.00	.6714-01	.8703-02	6.754	.1157-03	.9727-02
66	12500	.69000	147.00	.1057	.1692-02	1.063	.1821-03	.1531-01
66	12500	1.0640	146.00	.1292	.8040-02	1.300	.2227-03	.1872-01
66	12500	1.4370	145.00	.2184	.3207-01	2.196	.3762-03	.3163-01
66	12500	2.2930	144.00	.2803	.4876-01	2.819	.4829-03	.4060-01
66	12500	2.6990	155.00	.0000	.0000	.0000	.0000	.0000
0	0	0	0	0	0	0	0	0
66	0.87500	154.00	.1006	.3247-03	1.012	.1734-03	.1458-01	
66	0.87500	153.00	.8110-01	-.4938-02	.8158	.1397-03	.1175-01	
66	0.87500	152.00	.1024	.8052-03	1.030	.1764-03	.1484-01	
66	0.87500	151.00	.1488	.1332-01	1.497	.2564-03	.2156-01	
66	0.87500	150.00	.1339	.9293-02	1.347	.2307-03	.1940-01	

DATE 03 APR 79

PAGE 232
(R2XF60)

AMES OH58 HEATING AND PRESSURE DATA

OH58 FUSELAGE/ELEVON-PRESSURES

FUSELAGE

RUN NUMBER	Z	X	TAP NO	P PSIA	CP	P/PINF	P/PT	P/PT2
66	1.1250	.00000	161.00	.4543-01	-.1456-01	.4569	.7827-04	.6581-02
66	1.1250	.69000	160.00	.0000	.0000	.0000	.0000	.0000
66	1.1250	1.0640	159.00	.0000	.0000	.0000	.0000	.0000
66	1.1250	1.4370	158.00	.7381-01	-.6903-02	.7425	.1272-03	.1069-01
66	1.1250	2.2930	157.00	.1279	.7679-02	1.286	.2204-03	.1853-01
66	1.1250	2.6990	156.00	.1261	.7190-02	1.268	.2172-03	.1827-01
66	1.1250	2.6990	167.00	.0000	.0000	.0000	.0000	.0000
0	1.3750	.00000	166.00	.0000	.0000	.0000	.0000	.0000
0	1.3750	.69000	165.00	.6672-01	-.8815-02	.6712	.1150-03	.9666-02
66	1.3750	1.0640	164.00	2.885	.7511	.29.02	.4970-02	.4179
66	1.3750	1.4370	163.00	.0000	.0000	.0000	.0000	.0000
0	1.3750	2.2930	162.00	.1109	.3089-02	1.115	.1910-03	.1606-01
66	1.3750	2.6990						